STIC Search Report
Biotech-Chem Library

STIC Database Tracking Number: 145345

TO: Janet Epps-Ford
Location: REM-2C05/2C18
Art Unit: 1635
Wednesday, February 16, 2005
Case Serial Number: 10/001863

From: Paul Schulwitz
Location: Biotech-Chem Library
REM-1A65
Phone: (571)272-2527

paul.schulwitz@uspto.gov

Search Notes

Examiner Epps-Ford,

See attached results.

If you have any questions about this search feel free to contact me at any time.

Thank you for using STIC search services!

Paul Schulwitz
Technical Information Specialist
STIC Biotech/Chem Library
(571)272-2527

Schreiber, David

From: Epps-Ford, Janet
Sent: Friday, February 04, 2005 1:53 PM
To: Schreiber, David
Subject: 10/001863-Score over length.

Please perform a score over length search of SEQ ID NO: 3 of application no. 10/001863.

Search for compounds that are 8 to 80 nucleobases in length, having at least 75% identity to SEQ ID NO: 3.

Please search all commerical and patent (issued and published) nucleic acid databases.

Thanks,

Thanks,
Janet L. Epps-Ford, Ph.D.
Art Unit 1635
Mailbox: Remsen 2C18
Office: Remsen 2C05
Phone: 571-272-0757
Fax: 571-273-0757

GenCore version 5.1.6

OM nucleic - nucleic search, using sw model

Run on: February 16, 2005, 09:21:39 ; Search time 7 Seconds
(without alignments)
3.412 Million cell updates/sec

Title: us-10-001-863-3
Perfect score: 3811
Sequence: 1 acagggccactgctgctcac.....tctcactgacaggagaacta 3811

Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 0.5

Searched: 153 seqs, 3134 residues

Total number of hits satisfying chosen parameters: 306

Minimum DB seq length: 8
Maximum DB seq length: 80

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 153 summaries

Database : rgedb:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description
1	33	0.9	33	1	BD161165	ACCESSION:BD161165
c 2	30	0.8	30	1	AX057533	ACCESSION:AX057533
3	29.4	0.8	31	1	AX057532	ACCESSION:AX057532
4	28.4	0.7	30	1	AX057530	ACCESSION:AX057530
c 5	27	0.7	27	1	AX057531	ACCESSION:AX057531
c 6	26	0.7	26	1	AX057507	ACCESSION:AX057507
7	24	0.6	24	1	CQ873743	ACCESSION:CQ873743
c 8	24	0.6	24	1	AX057505	ACCESSION:AX057505
c 9	24	0.6	24	1	AX057510	ACCESSION:AX057510
c 10	24	0.6	24	1	BD102554	ACCESSION:BD102554
11	23	0.6	23	1	AX057483	ACCESSION:AX057483
12	23	0.6	23	1	AX057487	ACCESSION:AX057487
13	23	0.6	23	1	AX057496	ACCESSION:AX057496
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15	22	0.6	22	1	AX057486	ACCESSION:AX057486
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18	21.2	0.6	27	1	AR191031	ACCESSION:AR191031
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c 21	21	0.6	21	1	AX057523	ACCESSION:AX057523
22	20	0.5	20	1	AX057472	ACCESSION:AX057472
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c 45	20	0.5	20	1	AX057515	ACCESSION:AX057515
c 46	20	0.5	20	1	AX057516	ACCESSION:AX057516
c 47	20	0.5	20	1	AX057517	ACCESSION:AX057517
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c 52	20	0.5	20	1	AX057522	ACCESSION:AX057522
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72	16.2	0.4	21	1	AR233713	ACCESSION:AR233713
c 73	16.2	0.4	21	1	AR367361	ACCESSION:AR367361
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83	15.8	0.4	20	1	AR079581	ACCESSION:AR079581
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87	15.8	0.4	20	1	AR150304	ACCESSION:AR150304
c 88	15.8	0.4	20	1	AR178801	ACCESSION:AR178801
c 89	15.8	0.4	20	1	BD138261	ACCESSION:BD138261
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c 102	15.8	0.4	21	1	AX018466	ACCESSION:AX018466
c 103	15.8	0.4	21	1	AX921483	ACCESSION:AX921483
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c	110	15.4	0.4	18	1	AX637740
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c	123	15.2	0.4	20	1	AR030970
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	145	15	0.4	17	1	AR036967
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ACCESSION:AR083519
ACCESSION:AX637740
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ACCESSION:CQ829824
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ACCESSION:AR317378
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ACCESSION:I21071
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ACCESSION:AX217411
ACCESSION:AX217777
ACCESSION:AX217778
ACCESSION:AR085548
ACCESSION:AR216068
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ALIGNMENTS

RESULT 1
BD161165
LOCUS BD161165 33 bp DNA linear PAT 17-JAN-2003
DEFINITION Protein participating in mechanism for preventing infection and gene encoding the protein.
ACCESSION BD161165
VERSION BD161165.1 GI:27866923
KEYWORDS JP 2002176986-A/3.
SOURCE synthetic construct
ORGANISM synthetic construct
other sequences; artificial sequences.
REFERENCE 1 (bases 1 to 33)
AUTHORS Yoshikai,Y., Matsuguchi,T. and Iwami,K.
TITLE Protein participating in mechanism for preventing infection and gene encoding the protein
JOURNAL Patent: JP 2002176986-A 3 25-JUN-2002;
NAGOYA INDUSTRIAL SCIENCE RESEARCH INSTITUTE
COMMENT OS Artificial Sequence
PN JP 2002176986-A/3
PD 25-JUN-2002
PF 14-DEC-2000 JP 2000380561
PI YASUNOBU YOSHIKAI,TETSUYA MATSUGUCHI,KENICHIRO IWAMI PC C12N15/09,C07K14/705,C12N1/15,C12N1/19,C12N1/21,C12N5/10// PC C12P21/02,
PC (C12N5/10,C12R1:91),C12N15/00,C12N5/00,(C12N5/00,C12R1:91) CC Description of Artificial Sequence: cDNA to sequence 2 FH Key Location/Qualifiers
FT source 1. .33
FT /organism='Artificial Sequence'.
FEATURES Location/Qualifiers
source 1. .33
/organism="synthetic construct"
/mol_type="genomic DNA"
/db_xref="taxon:32630"

Query Match 0.9%; Score 33; DB 1; Length 33;
Best Local Similarity 100.0%; Pred. No. 5;
Matches 33; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 114 GAAAGCTGGGAGCCCTGCGTGGAGACTTGGCCC 146
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Db 1 GAAAGCTGGGAGCCCTGCGTGGAGACTTGGCCC 33

RESULT 2
AX057533/c
LOCUS AX057533 30 bp DNA linear PAT 17-JAN-2001
DEFINITION Sequence 69 from Patent WO0077204.
ACCESSION AX057533
VERSION AX057533.1 GI:12310267
KEYWORDS .
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE 1
AUTHORS Lorenz,E., Schwartz,D.A. and Schutte,B.C.
TITLE Variant tlr4 nucleic acid and uses thereof
JOURNAL Patent: WO 0077204-A 69 21-DEC-2000;
University of Iowa Research Foundation (US) ; Lorenz, Eva (US)
FEATURES Location/Qualifiers
source 1. .30
/organism="Homo sapiens"
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Query Match 0.8%; Score 30; DB 1; Length 30;
Best Local Similarity 100.0%; Pred. No. 8.4;
Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Db 30 AGCATTTAACTCACTCTCCAGTCTTCAGGT 1

RESULT 3
AX057532
LOCUS AX057532 31 bp DNA linear PAT 17-JAN-2001
DEFINITION Sequence 68 from Patent WO0077204.
ACCESSION AX057532
VERSION AX057532.1 GI:12310266
KEYWORDS .
SOURCE synthetic construct
ORGANISM synthetic construct
other sequences; artificial sequences.
REFERENCE 1
AUTHORS Lorenz,E., Schwartz,D.A. and Schutte,B.C.
TITLE Variant tlr4 nucleic acid and uses thereof
JOURNAL Patent: WO 0077204-A 68 21-DEC-2000;
University of Iowa Research Foundation (US) ; Lorenz, Eva (US)
FEATURES Location/Qualifiers
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Db          1 GGTTGCTGTTCTCAAAGTGATTTTGGGAGAA 31


RESULT 4
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LOCUS       AX057530                  30 bp    DNA     linear   PAT 17-JAN-2001
DEFINITION  Sequence 66 from Patent WO0077204.
ACCESSION   AX057530
VERSION     AX057530.1  GI:12310264
KEYWORDS    .
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            other sequences; artificial sequences.
REFERENCE   1
  AUTHORS   Lorenz,E., Schwartz,D.A. and Schutte,B.C.
  TITLE     Variant tlr4 nucleic acid and uses thereof
  JOURNAL   Patent: WO 0077204-A 66 21-DEC-2000;
            University of Iowa Research Foundation (US) ; Lorenz, Eva (US)
FEATURES             Location/Qualifiers
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                     /db_xref="taxon:32630"
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RESULT 5
AX057531/c
LOCUS       AX057531                  27 bp    DNA     linear   PAT 17-JAN-2001
DEFINITION  Sequence 67 from Patent WO0077204.
ACCESSION   AX057531
VERSION     AX057531.1  GI:12310265
KEYWORDS    .
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1
  AUTHORS   Lorenz,E., Schwartz,D.A. and Schutte,B.C.
  TITLE     Variant tlr4 nucleic acid and uses thereof
  JOURNAL   Patent: WO 0077204-A 67 21-DEC-2000;
            University of Iowa Research Foundation (US) ; Lorenz, Eva (US)
FEATURES             Location/Qualifiers
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Db         27 GTGGGAATGCTTTTTCAGAAGTTGATC 1


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LOCUS       AX057507                  26 bp    DNA     linear   PAT 17-JAN-2001
DEFINITION  Sequence 43 from Patent WO0077204.
ACCESSION   AX057507
VERSION     AX057507.1  GI:12310241
KEYWORDS    .
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1
  AUTHORS   Lorenz,E., Schwartz,D.A. and Schutte,B.C.
  TITLE     Variant tlr4 nucleic acid and uses thereof
  JOURNAL   Patent: WO 0077204-A 43 21-DEC-2000;
            University of Iowa Research Foundation (US) ; Lorenz, Eva (US)
FEATURES             Location/Qualifiers
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Qy       1117 TGACTATTGAAAGGGTAAAAGACTTT 1142
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Db         26 TGACTATTGAAAGGGTAAAAGACTTT 1


RESULT 7
CQ873743
LOCUS       CQ873743                  24 bp    RNA     linear   PAT 27-SEP-2004
DEFINITION  Sequence 162 from Patent WO2004076622.
ACCESSION   CQ873743
VERSION     CQ873743.1  GI:52747335
KEYWORDS    .
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1
  AUTHORS   Taira,K. and Kawasaki,H.
  TITLE     Regulation of mammalian cells
  JOURNAL   Patent: WO 2004076622-A 162 10-SEP-2004;
            National Institute of Advanced Industrial Science and Tec hnology
            (JP)
FEATURES             Location/Qualifiers
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Db          1 TCTGCCTTCACTACAGAGACTTTA 24


RESULT 8
AX057505/c
LOCUS       AX057505                  24 bp    DNA     linear   PAT 17-JAN-2001
DEFINITION  Sequence 41 from Patent WO0077204.
ACCESSION   AX057505
VERSION     AX057505.1  GI:12310239
KEYWORDS    .
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
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            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1
  AUTHORS   Lorenz,E., Schwartz,D.A. and Schutte,B.C.
  TITLE     Variant tlr4 nucleic acid and uses thereof
  JOURNAL   Patent: WO 0077204-A 41 21-DEC-2000;
            University of Iowa Research Foundation (US) ; Lorenz, Eva (US)
FEATURES             Location/Qualifiers
     source          1. .24
                     /organism="Homo sapiens"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:9606"

  Query Match             0.6%;  Score 24;  DB 1;  Length 24;
  Best Local Similarity   100.0%;  Pred. No. 22;
  Matches   24;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        836 AGAAATTAGGCTTCATAAGCTGAC 859
              ||||||||||||||||||||||||
Db         24 AGAAATTAGGCTTCATAAGCTGAC 1


RESULT 9
AX057510/c
LOCUS       AX057510                 24 bp    DNA     linear   PAT 17-JAN-2001
DEFINITION  Sequence 46 from Patent WO0077204.
ACCESSION   AX057510
VERSION     AX057510.1  GI:12310244
KEYWORDS    .
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1
  AUTHORS   Lorenz,E., Schwartz,D.A. and Schutte,B.C.
  TITLE     Variant tlr4 nucleic acid and uses thereof
  JOURNAL   Patent: WO 0077204-A 46 21-DEC-2000;
            University of Iowa Research Foundation (US) ; Lorenz, Eva (US)
FEATURES             Location/Qualifiers
     source          1. .24
                     /organism="Homo sapiens"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:9606"

  Query Match             0.6%;  Score 24;  DB 1;  Length 24;
  Best Local Similarity   100.0%;  Pred. No. 22;
  Matches   24;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1464 TTGAAACAAATGAGTGAGTTTTCA 1487
              ||||||||||||||||||||||||
Db         24 TTGAAACAAATGAGTGAGTTTTCA 1


RESULT 10
BD102554/c
LOCUS       BD102554                 24 bp    DNA     linear   PAT 27-AUG-2002
DEFINITION  TLR/CD14 binding inhibitor.
ACCESSION   BD102554
VERSION     BD102554.1  GI:22648128
KEYWORDS    WO 0172993-A/7.
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            other sequences; artificial sequences.
REFERENCE   1  (bases 1 to 24)
  AUTHORS   Furusako,S., Mori,S., Shirakawa,K. and Takahashi,T.
  TITLE     TLR/CD14 binding inhibitor
  JOURNAL   Patent: WO 0172993-A 7 04-OCT-2001;
            MOCHIDA PHARMACEUTICAL CO LTD,SHOJI FURUSAKO,SADAO MORI, KAMON
            SHIRAKAWA, TOMOHIRO TAKAHASHI
COMMENT     OS   Artificial Sequence
            PN   WO 0172993-A/7
            PD   04-OCT-2001
            PF   02-APR-2001 WO 2001JP002869
            PR   31-MAR-2000 JP 00P    99617,22-NOV-2000 JP 00P   356719 PR
            28-MAR-2001 US    09/806158
            PI   SHOJI FURUSAKO,SADAO MORI,KAMON SHIRAKAWA,TOMOHIRO TAKAHASHI
            PC   C12N15/00,C07K7/08,C07K14/705,C07K16/28,A61K45/00,A61P31/04,
            PC   A61P38/02,
            PC   A61P39/395,A61P43/00,G01N33/15,G01N33/50,G01N33/53,G01N33/577
            CC   TLR/CD14 binding inhibitor
            FH   Key             Location/Qualifiers
            FT   source          1. .24
            FT                   /organism='Artificial Sequence'.
FEATURES             Location/Qualifiers
     source          1. .24
                     /organism="synthetic construct"
                     /mol_type="genomic DNA"
                     /db_xref="taxon:32630"

  Query Match             0.6%;  Score 24;  DB 1;  Length 24;
  Best Local Similarity   100.0%;  Pred. No. 22;
  Matches   24;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1137 GACTTTTCTTATAATTTCGGATGG 1160
              ||||||||||||||||||||||||
Db         24 GACTTTTCTTATAATTTCGGATGG 1


RESULT 11
AX057483
LOCUS       AX057483                 23 bp    DNA     linear   PAT 17-JAN-2001
DEFINITION  Sequence 19 from Patent WO0077204.
ACCESSION   AX057483
VERSION     AX057483.1  GI:12310217
KEYWORDS    .
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1
  AUTHORS   Lorenz,E., Schwartz,D.A. and Schutte,B.C.
  TITLE     Variant tlr4 nucleic acid and uses thereof
  JOURNAL   Patent: WO 0077204-A 19 21-DEC-2000;
            University of Iowa Research Foundation (US) ; Lorenz, Eva (US)
FEATURES             Location/Qualifiers
     source          1. .23
                     /organism="Homo sapiens"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:9606"

  Query Match             0.6%;  Score 23;  DB 1;  Length 23;
  Best Local Similarity   100.0%;  Pred. No. 26;
  Matches   23;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        943 TGGGAGAATTTAGAAATGAAGGA 965
              |||||||||||||||||||||||
Db          1 TGGGAGAATTTAGAAATGAAGGA 23


RESULT 12
AX057487
LOCUS       AX057487                 23 bp    DNA     linear   PAT 17-JAN-2001
DEFINITION  Sequence 23 from Patent WO0077204.
ACCESSION   AX057487
VERSION     AX057487.1  GI:12310221
KEYWORDS    .
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1
  AUTHORS   Lorenz,E., Schwartz,D.A. and Schutte,B.C.
  TITLE     Variant tlr4 nucleic acid and uses thereof
  JOURNAL   Patent: WO 0077204-A 23 21-DEC-2000;
            University of Iowa Research Foundation (US) ; Lorenz, Eva (US)
FEATURES             Location/Qualifiers
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     source          1. .23
                     /organism="Homo sapiens"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:9606"

  Query Match              0.6%;  Score 23;  DB 1;  Length 23;
  Best Local Similarity   100.0%;  Pred. No. 26;
  Matches   23;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1410 TCAAACTTCTTGGGCTTAGAACA 1432
              |||||||||||||||||||||||
Db          1 TCAAACTTCTTGGGCTTAGAACA 23


RESULT 13
AX057496
LOCUS       AX057496                 23 bp    DNA     linear   PAT 17-JAN-2001
DEFINITION  Sequence 32 from Patent WO0077204.
ACCESSION   AX057496
VERSION     AX057496.1  GI:12310230
KEYWORDS    .
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1
  AUTHORS   Lorenz,E., Schwartz,D.A. and Schutte,B.C.
  TITLE     Variant tlr4 nucleic acid and uses thereof
  JOURNAL   Patent: WO 0077204-A 32 21-DEC-2000;
            University of Iowa Research Foundation (US) ; Lorenz, Eva (US)
FEATURES             Location/Qualifiers
     source          1. .23
                     /organism="Homo sapiens"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:9606"

  Query Match              0.6%;  Score 23;  DB 1;  Length 23;
  Best Local Similarity   100.0%;  Pred. No. 26;
  Matches   23;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2459 TATCATCTTCATTGTCCTGCAGA 2481
              |||||||||||||||||||||||
Db          1 TATCATCTTCATTGTCCTGCAGA 23


RESULT 14
AX057508/c
LOCUS       AX057508                 23 bp    DNA     linear   PAT 17-JAN-2001
DEFINITION  Sequence 44 from Patent WO0077204.
ACCESSION   AX057508
VERSION     AX057508.1  GI:12310242
KEYWORDS    .
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1
  AUTHORS   Lorenz,E., Schwartz,D.A. and Schutte,B.C.
  TITLE     Variant tlr4 nucleic acid and uses thereof
  JOURNAL   Patent: WO 0077204-A 44 21-DEC-2000;
            University of Iowa Research Foundation (US) ; Lorenz, Eva (US)
FEATURES             Location/Qualifiers
     source          1. .23
                     /organism="Homo sapiens"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:9606"

  Query Match              0.6%;  Score 23;  DB 1;  Length 23;
  Best Local Similarity   100.0%;  Pred. No. 26;
  Matches   23;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1200 CCCACATTGAAACTCAAATCTCT 1222
              |||||||||||||||||||||||
Db         23 CCCACATTGAAACTCAAATCTCT 1


RESULT 15
AX057486
LOCUS       AX057486                 22 bp    DNA     linear   PAT 17-JAN-2001
DEFINITION  Sequence 22 from Patent WO0077204.
ACCESSION   AX057486
VERSION     AX057486.1  GI:12310220
KEYWORDS    .
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1
  AUTHORS   Lorenz,E., Schwartz,D.A. and Schutte,B.C.
  TITLE     Variant tlr4 nucleic acid and uses thereof
  JOURNAL   Patent: WO 0077204-A 22 21-DEC-2000;
            University of Iowa Research Foundation (US) ; Lorenz, Eva (US)
FEATURES             Location/Qualifiers
     source          1. .22
                     /organism="Homo sapiens"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:9606"

  Query Match              0.6%;  Score 22;  DB 1;  Length 22;
  Best Local Similarity   100.0%;  Pred. No. 30;
  Matches   22;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1323 TTCAAAGGTTGCTGTTCTCAAA 1344
              ||||||||||||||||||||||
Db          1 TTCAAAGGTTGCTGTTCTCAAA 22


RESULT 16
AX057506/c
LOCUS       AX057506                 22 bp    DNA     linear   PAT 17-JAN-2001
DEFINITION  Sequence 42 from Patent WO0077204.
ACCESSION   AX057506
VERSION     AX057506.1  GI:12310240
KEYWORDS    .
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1
  AUTHORS   Lorenz,E., Schwartz,D.A. and Schutte,B.C.
  TITLE     Variant tlr4 nucleic acid and uses thereof
  JOURNAL   Patent: WO 0077204-A 42 21-DEC-2000;
            University of Iowa Research Foundation (US) ; Lorenz, Eva (US)
FEATURES             Location/Qualifiers
     source          1. .22
                     /organism="Homo sapiens"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:9606"

  Query Match              0.6%;  Score 22;  DB 1;  Length 22;
  Best Local Similarity   100.0%;  Pred. No. 30;
  Matches   22;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        992 TCTAGAGGGCCTGTGCAATTTG 1013
              ||||||||||||||||||||||
Db         22 TCTAGAGGGCCTGTGCAATTTG 1


RESULT 17
AR184845
LOCUS       AR184845                 27 bp    DNA     linear   PAT 20-APR-2002
DEFINITION  Sequence 333 from patent US 6346398.
ACCESSION   AR184845
VERSION     AR184845.1  GI:20230810
KEYWORDS    .
SOURCE      Unknown.
```

```
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 27)
  AUTHORS   Pavco,P., McSwiggen,J., Stinchcomb,D. and Escobedo,J.
  TITLE     Method and reagent for the treatment of diseases or conditions
            related to levels of vascular endothelial growth factor receptor
  JOURNAL   Patent: US 6346398-A 333 12-FEB-2002;
FEATURES             Location/Qualifiers
     source          1. .27
                     /organism="unknown"
                     /mol_type="unassigned DNA"

  Query Match             0.6%;  Score 21.2;  DB 1;  Length 27;
  Best Local Similarity   85.2%;  Pred. No. 51;
  Matches   23;  Conservative    0;  Mismatches    4;  Indels    0;  Gaps    0;

Qy       2673 ACATCTATCTGAAGAGGAAAAATAAAA 2699
              |||||| ||||| || |||| ||||||
Db          1 ACATCTGTCTGATGANGAAATATAAAA 27


RESULT 18
AR191031
LOCUS       AR191031                  27 bp    DNA     linear   PAT 20-APR-2002
DEFINITION  Sequence 6519 from patent US 6346398.
ACCESSION   AR191031
VERSION     AR191031.1  GI:20236996
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 27)
  AUTHORS   Pavco,P., McSwiggen,J., Stinchcomb,D. and Escobedo,J.
  TITLE     Method and reagent for the treatment of diseases or conditions
            related to levels of vascular endothelial growth factor receptor
  JOURNAL   Patent: US 6346398-A 6519 12-FEB-2002;
FEATURES             Location/Qualifiers
     source          1. .27
                     /organism="unknown"
                     /mol_type="unassigned DNA"

  Query Match             0.6%;  Score 21.2;  DB 1;  Length 27;
  Best Local Similarity   85.2%;  Pred. No. 51;
  Matches   23;  Conservative    0;  Mismatches    4;  Indels    0;  Gaps    0;

Qy       2673 ACATCTATCTGAAGAGGAAAAATAAAA 2699
              |||||| ||||| || |||| ||||||
Db          1 ACATCTGTCTGATGANGAAACATAAAA 27


RESULT 19
AX057484
LOCUS       AX057484                  21 bp    DNA     linear   PAT 17-JAN-2001
DEFINITION  Sequence 20 from Patent WO0077204.
ACCESSION   AX057484
VERSION     AX057484.1  GI:12310218
KEYWORDS    .
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1
  AUTHORS   Lorenz,E., Schwartz,D.A. and Schutte,B.C.
  TITLE     Variant tlr4 nucleic acid and uses thereof
  JOURNAL   Patent: WO 0077204-A 20 21-DEC-2000;
            University of Iowa Research Foundation (US) ; Lorenz, Eva (US)
FEATURES             Location/Qualifiers
     source          1. .21
                     /organism="Homo sapiens"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:9606"

  Query Match             0.6%;  Score 21;  DB 1;  Length 21;
  Best Local Similarity   100.0%;  Pred. No. 34;
  Matches   21;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1093 TTTCTTCATTTTCCCTGGTGA 1113
              |||||||||||||||||||||
Db          1 TTTCTTCATTTTCCCTGGTGA 21


RESULT 20
AX057503/c
LOCUS       AX057503                  21 bp    DNA     linear   PAT 17-JAN-2001
DEFINITION  Sequence 39 from Patent WO0077204.
ACCESSION   AX057503
VERSION     AX057503.1  GI:12310237
KEYWORDS    .
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1
  AUTHORS   Lorenz,E., Schwartz,D.A. and Schutte,B.C.
  TITLE     Variant tlr4 nucleic acid and uses thereof
  JOURNAL   Patent: WO 0077204-A 39 21-DEC-2000;
            University of Iowa Research Foundation (US) ; Lorenz, Eva (US)
FEATURES             Location/Qualifiers
     source          1. .21
                     /organism="Homo sapiens"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:9606"

  Query Match             0.6%;  Score 21;  DB 1;  Length 21;
  Best Local Similarity   100.0%;  Pred. No. 34;
  Matches   21;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        524 AGCCTTTTCTGGACTATCAAG 544
              |||||||||||||||||||||
Db         21 AGCCTTTTCTGGACTATCAAG 1


RESULT 21
AX057523/c
LOCUS       AX057523                  21 bp    DNA     linear   PAT 17-JAN-2001
DEFINITION  Sequence 59 from Patent WO0077204.
ACCESSION   AX057523
VERSION     AX057523.1  GI:12310257
KEYWORDS    .
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1
  AUTHORS   Lorenz,E., Schwartz,D.A. and Schutte,B.C.
  TITLE     Variant tlr4 nucleic acid and uses thereof
  JOURNAL   Patent: WO 0077204-A 59 21-DEC-2000;
            University of Iowa Research Foundation (US) ; Lorenz, Eva (US)
FEATURES             Location/Qualifiers
     source          1. .21
                     /organism="Homo sapiens"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:9606"

  Query Match             0.6%;  Score 21;  DB 1;  Length 21;
  Best Local Similarity   100.0%;  Pred. No. 34;
  Matches   21;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2813 AGATATGCAGGGCTGCTAATC 2833
              |||||||||||||||||||||
Db         21 AGATATGCAGGGCTGCTAATC 1


RESULT 22
AX057472
LOCUS       AX057472                  20 bp    DNA     linear   PAT 17-JAN-2001
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```
DEFINITION  Sequence 8 from Patent WO0077204.
ACCESSION   AX057472
VERSION     AX057472.1  GI:12310206
KEYWORDS    .
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1
  AUTHORS   Lorenz,E., Schwartz,D.A. and Schutte,B.C.
  TITLE     Variant tlr4 nucleic acid and uses thereof
  JOURNAL   Patent: WO 0077204-A 8 21-DEC-2000;
            University of Iowa Research Foundation (US) ; Lorenz, Eva (US)
FEATURES             Location/Qualifiers
     source          1. .20
                     /organism="Homo sapiens"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:9606"

  Query Match             0.5%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 40;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        448 ATGGGGCATATCAGAGCCTA 467
              ||||||||||||||||||||
Db          1 ATGGGGCATATCAGAGCCTA 20


RESULT 23
AX057473/c
LOCUS       AX057473                  20 bp    DNA     linear   PAT 17-JAN-2001
DEFINITION  Sequence 9 from Patent WO0077204.
ACCESSION   AX057473
VERSION     AX057473.1  GI:12310207
KEYWORDS    .
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1
  AUTHORS   Lorenz,E., Schwartz,D.A. and Schutte,B.C.
  TITLE     Variant tlr4 nucleic acid and uses thereof
  JOURNAL   Patent: WO 0077204-A 9 21-DEC-2000;
            University of Iowa Research Foundation (US) ; Lorenz, Eva (US)
FEATURES             Location/Qualifiers
     source          1. .20
                     /organism="Homo sapiens"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:9606"

  Query Match             0.5%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 40;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        587 AGAGAACTTCCCCATTGGAC 606
              ||||||||||||||||||||
Db         20 AGAGAACTTCCCCATTGGAC 1


RESULT 24
AX057474
LOCUS       AX057474                  20 bp    DNA     linear   PAT 17-JAN-2001
DEFINITION  Sequence 10 from Patent WO0077204.
ACCESSION   AX057474
VERSION     AX057474.1  GI:12310208
KEYWORDS    .
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1
  AUTHORS   Lorenz,E., Schwartz,D.A. and Schutte,B.C.
  TITLE     Variant tlr4 nucleic acid and uses thereof
  JOURNAL   Patent: WO 0077204-A 10 21-DEC-2000;
            University of Iowa Research Foundation (US) ; Lorenz, Eva (US)
FEATURES             Location/Qualifiers
     source          1. .20
                     /organism="Homo sapiens"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:9606"

  Query Match             0.5%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 40;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2467 TCATTGTCCTGCAGAAGGTG 2486
              ||||||||||||||||||||
Db          1 TCATTGTCCTGCAGAAGGTG 20


RESULT 25
AX057475/c
LOCUS       AX057475                  20 bp    DNA     linear   PAT 17-JAN-2001
DEFINITION  Sequence 11 from Patent WO0077204.
ACCESSION   AX057475
VERSION     AX057475.1  GI:12310209
KEYWORDS    .
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1
  AUTHORS   Lorenz,E., Schwartz,D.A. and Schutte,B.C.
  TITLE     Variant tlr4 nucleic acid and uses thereof
  JOURNAL   Patent: WO 0077204-A 11 21-DEC-2000;
            University of Iowa Research Foundation (US) ; Lorenz, Eva (US)
FEATURES             Location/Qualifiers
     source          1. .20
                     /organism="Homo sapiens"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:9606"

  Query Match             0.5%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 40;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2590 GACGACTCAGAAAAGCCCTG 2609
              ||||||||||||||||||||
Db         20 GACGACTCAGAAAAGCCCTG 1


RESULT 26
AX057480
LOCUS       AX057480                  20 bp    DNA     linear   PAT 17-JAN-2001
DEFINITION  Sequence 16 from Patent WO0077204.
ACCESSION   AX057480
VERSION     AX057480.1  GI:12310214
KEYWORDS    .
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1
  AUTHORS   Lorenz,E., Schwartz,D.A. and Schutte,B.C.
  TITLE     Variant tlr4 nucleic acid and uses thereof
  JOURNAL   Patent: WO 0077204-A 16 21-DEC-2000;
            University of Iowa Research Foundation (US) ; Lorenz, Eva (US)
FEATURES             Location/Qualifiers
     source          1. .20
                     /organism="Homo sapiens"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:9606"

  Query Match             0.5%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 40;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;
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Qy        557 GGTGGCTGTGGAGACAAATC 576
              ||||||||||||||||||||
Db          1 GGTGGCTGTGGAGACAAATC 20


RESULT 27
AX057481
LOCUS       AX057481                  20 bp    DNA     linear   PAT 17-JAN-2001
DEFINITION  Sequence 17 from Patent WO0077204.
ACCESSION   AX057481
VERSION     AX057481.1  GI:12310215
KEYWORDS    .
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1
  AUTHORS   Lorenz,E., Schwartz,D.A. and Schutte,B.C.
  TITLE     Variant tlr4 nucleic acid and uses thereof
  JOURNAL   Patent: WO 0077204-A 17 21-DEC-2000;
            University of Iowa Research Foundation (US) ; Lorenz, Eva (US)
FEATURES             Location/Qualifiers
     source          1. .20
                     /organism="Homo sapiens"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:9606"

  Query Match             0.5%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 40;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        700 ACTTGGACCTTTCCAGCAAC 719
              ||||||||||||||||||||
Db          1 ACTTGGACCTTTCCAGCAAC 20


RESULT 28
AX057485
LOCUS       AX057485                  20 bp    DNA     linear   PAT 17-JAN-2001
DEFINITION  Sequence 21 from Patent WO0077204.
ACCESSION   AX057485
VERSION     AX057485.1  GI:12310219
KEYWORDS    .
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1
  AUTHORS   Lorenz,E., Schwartz,D.A. and Schutte,B.C.
  TITLE     Variant tlr4 nucleic acid and uses thereof
  JOURNAL   Patent: WO 0077204-A 21 21-DEC-2000;
            University of Iowa Research Foundation (US) ; Lorenz, Eva (US)
FEATURES             Location/Qualifiers
     source          1. .20
                     /organism="Homo sapiens"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:9606"

  Query Match             0.5%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 40;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1190 TGGACAGTTTCCCACATTGA 1209
              ||||||||||||||||||||
Db          1 TGGACAGTTTCCCACATTGA 20


RESULT 29
AX057488
LOCUS       AX057488                  20 bp    DNA     linear   PAT 17-JAN-2001
DEFINITION  Sequence 24 from Patent WO0077204.
ACCESSION   AX057488
VERSION     AX057488.1  GI:12310222
KEYWORDS    .
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1
  AUTHORS   Lorenz,E., Schwartz,D.A. and Schutte,B.C.
  TITLE     Variant tlr4 nucleic acid and uses thereof
  JOURNAL   Patent: WO 0077204-A 24 21-DEC-2000;
            University of Iowa Research Foundation (US) ; Lorenz, Eva (US)
FEATURES             Location/Qualifiers
     source          1. .20
                     /organism="Homo sapiens"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:9606"

  Query Match             0.5%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 40;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1541 CAGAGTTGCTTTCAATGGCA 1560
              ||||||||||||||||||||
Db          1 CAGAGTTGCTTTCAATGGCA 20


RESULT 30
AX057489
LOCUS       AX057489                  20 bp    DNA     linear   PAT 17-JAN-2001
DEFINITION  Sequence 25 from Patent WO0077204.
ACCESSION   AX057489
VERSION     AX057489.1  GI:12310223
KEYWORDS    .
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1
  AUTHORS   Lorenz,E., Schwartz,D.A. and Schutte,B.C.
  TITLE     Variant tlr4 nucleic acid and uses thereof
  JOURNAL   Patent: WO 0077204-A 25 21-DEC-2000;
            University of Iowa Research Foundation (US) ; Lorenz, Eva (US)
FEATURES             Location/Qualifiers
     source          1. .20
                     /organism="Homo sapiens"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:9606"

  Query Match             0.5%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 40;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1612 TCCAGGAAAACTTCCTTCCA 1631
              ||||||||||||||||||||
Db          1 TCCAGGAAAACTTCCTTCCA 20


RESULT 31
AX057491
LOCUS       AX057491                  20 bp    DNA     linear   PAT 18-JAN-2001
DEFINITION  Sequence 27 from Patent WO0077204.
ACCESSION   AX057491
VERSION     AX057491.1  GI:12310225
KEYWORDS    .
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1
  AUTHORS   Lorenz,E., Schwartz,D.A. and Schutte,B.C.
  TITLE     Variant tlr4 nucleic acid and uses thereof
  JOURNAL   Patent: WO 0077204-A 27 21-DEC-2000;
            University of Iowa Research Foundation (US) ; Lorenz, Eva (US)
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FEATURES             Location/Qualifiers
     source          1. .20
                     /organism="Homo sapiens"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:9606"

  Query Match              0.5%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 40;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1924 ACCAGAGTTTCCTGCAATGG 1943
              ||||||||||||||||||||
Db          1 ACCAGAGTTTCCTGCAATGG 20


RESULT 32
AX057492
LOCUS       AX057492                  20 bp    DNA     linear   PAT 17-JAN-2001
DEFINITION  Sequence 28 from Patent WO0077204.
ACCESSION   AX057492
VERSION     AX057492.1  GI:12310226
KEYWORDS    .
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1
  AUTHORS   Lorenz,E., Schwartz,D.A. and Schutte,B.C.
  TITLE     Variant tlr4 nucleic acid and uses thereof
  JOURNAL   Patent: WO 0077204-A 28 21-DEC-2000;
            University of Iowa Research Foundation (US) ; Lorenz, Eva (US)
FEATURES             Location/Qualifiers
     source          1. .20
                     /organism="Homo sapiens"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:9606"

  Query Match              0.5%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 40;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2017 TGCCTGTGCTGAGTTTGAAT 2036
              ||||||||||||||||||||
Db          1 TGCCTGTGCTGAGTTTGAAT 20


RESULT 33
AX057493
LOCUS       AX057493                  20 bp    DNA     linear   PAT 17-JAN-2001
DEFINITION  Sequence 29 from Patent WO0077204.
ACCESSION   AX057493
VERSION     AX057493.1  GI:12310227
KEYWORDS    .
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1
  AUTHORS   Lorenz,E., Schwartz,D.A. and Schutte,B.C.
  TITLE     Variant tlr4 nucleic acid and uses thereof
  JOURNAL   Patent: WO 0077204-A 29 21-DEC-2000;
            University of Iowa Research Foundation (US) ; Lorenz, Eva (US)
FEATURES             Location/Qualifiers
     source          1. .20
                     /organism="Homo sapiens"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:9606"

  Query Match              0.5%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 40;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2074 CGGTCCTCAGTGTGCTTGTA 2093
              ||||||||||||||||||||
Db          1 CGGTCCTCAGTGTGCTTGTA 20


RESULT 34
AX057494
LOCUS       AX057494                  20 bp    DNA     linear   PAT 17-JAN-2001
DEFINITION  Sequence 30 from Patent WO0077204.
ACCESSION   AX057494
VERSION     AX057494.1  GI:12310228
KEYWORDS    .
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1
  AUTHORS   Lorenz,E., Schwartz,D.A. and Schutte,B.C.
  TITLE     Variant tlr4 nucleic acid and uses thereof
  JOURNAL   Patent: WO 0077204-A 30 21-DEC-2000;
            University of Iowa Research Foundation (US) ; Lorenz, Eva (US)
FEATURES             Location/Qualifiers
     source          1. .20
                     /organism="Homo sapiens"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:9606"

  Query Match              0.5%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 40;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2210 CCAGGATGAGGACTGGGTAA 2229
              ||||||||||||||||||||
Db          1 CCAGGATGAGGACTGGGTAA 20


RESULT 35
AX057495
LOCUS       AX057495                  20 bp    DNA     linear   PAT 17-JAN-2001
DEFINITION  Sequence 31 from Patent WO0077204.
ACCESSION   AX057495
VERSION     AX057495.1  GI:12310229
KEYWORDS    .
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1
  AUTHORS   Lorenz,E., Schwartz,D.A. and Schutte,B.C.
  TITLE     Variant tlr4 nucleic acid and uses thereof
  JOURNAL   Patent: WO 0077204-A 31 21-DEC-2000;
            University of Iowa Research Foundation (US) ; Lorenz, Eva (US)
FEATURES             Location/Qualifiers
     source          1. .20
                     /organism="Homo sapiens"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:9606"

  Query Match              0.5%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 40;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2351 AAGCCGAAAGGTGATTGTTG 2370
              ||||||||||||||||||||
Db          1 AAGCCGAAAGGTGATTGTTG 20


RESULT 36
AX057497
LOCUS       AX057497                  20 bp    DNA     linear   PAT 17-JAN-2001
DEFINITION  Sequence 33 from Patent WO0077204.
ACCESSION   AX057497
VERSION     AX057497.1  GI:12310231
KEYWORDS    .
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SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1
  AUTHORS   Lorenz,E., Schwartz,D.A. and Schutte,B.C.
  TITLE     Variant tlr4 nucleic acid and uses thereof
  JOURNAL   Patent: WO 0077204-A 33 21-DEC-2000;
            University of Iowa Research Foundation (US) ; Lorenz, Eva (US)
FEATURES             Location/Qualifiers
     source          1. .20
                     /organism="Homo sapiens"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:9606"

  Query Match             0.5%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 40;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2467 TCATTGTCCTGCAGAAGGTG 2486
              ||||||||||||||||||||
Db          1 TCATTGTCCTGCAGAAGGTG 20


RESULT 37
AX057498
LOCUS       AX057498                  20 bp    DNA     linear   PAT 17-JAN-2001
DEFINITION  Sequence 34 from Patent WO0077204.
ACCESSION   AX057498
VERSION     AX057498.1  GI:12310232
KEYWORDS    .
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1
  AUTHORS   Lorenz,E., Schwartz,D.A. and Schutte,B.C.
  TITLE     Variant tlr4 nucleic acid and uses thereof
  JOURNAL   Patent: WO 0077204-A 34 21-DEC-2000;
            University of Iowa Research Foundation (US) ; Lorenz, Eva (US)
FEATURES             Location/Qualifiers
     source          1. .20
                     /organism="Homo sapiens"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:9606"

  Query Match             0.5%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 40;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2590 GACGACTCAGAAAAGCCCTG 2609
              ||||||||||||||||||||
Db          1 GACGACTCAGAAAAGCCCTG 20


RESULT 38
AX057499
LOCUS       AX057499                  20 bp    DNA     linear   PAT 17-JAN-2001
DEFINITION  Sequence 35 from Patent WO0077204.
ACCESSION   AX057499
VERSION     AX057499.1  GI:12310233
KEYWORDS    .
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1
  AUTHORS   Lorenz,E., Schwartz,D.A. and Schutte,B.C.
  TITLE     Variant tlr4 nucleic acid and uses thereof
  JOURNAL   Patent: WO 0077204-A 35 21-DEC-2000;
            University of Iowa Research Foundation (US) ; Lorenz, Eva (US)
FEATURES             Location/Qualifiers
     source          1. .20
                     /organism="Homo sapiens"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:9606"

  Query Match             0.5%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 40;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2658 AATTGGCAGGAAGCAACATC 2677
              ||||||||||||||||||||
Db          1 AATTGGCAGGAAGCAACATC 20


RESULT 39
AX057504/c
LOCUS       AX057504                  20 bp    DNA     linear   PAT 17-JAN-2001
DEFINITION  Sequence 40 from Patent WO0077204.
ACCESSION   AX057504
VERSION     AX057504.1  GI:12310238
KEYWORDS    .
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1
  AUTHORS   Lorenz,E., Schwartz,D.A. and Schutte,B.C.
  TITLE     Variant tlr4 nucleic acid and uses thereof
  JOURNAL   Patent: WO 0077204-A 40 21-DEC-2000;
            University of Iowa Research Foundation (US) ; Lorenz, Eva (US)
FEATURES             Location/Qualifiers
     source          1. .20
                     /organism="Homo sapiens"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:9606"

  Query Match             0.5%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 40;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        733 TTTATTGCACAGACTTGCGG 752
              ||||||||||||||||||||
Db         20 TTTATTGCACAGACTTGCGG 1


RESULT 40
AX057509/c
LOCUS       AX057509                  20 bp    DNA     linear   PAT 17-JAN-2001
DEFINITION  Sequence 45 from Patent WO0077204.
ACCESSION   AX057509
VERSION     AX057509.1  GI:12310243
KEYWORDS    .
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1
  AUTHORS   Lorenz,E., Schwartz,D.A. and Schutte,B.C.
  TITLE     Variant tlr4 nucleic acid and uses thereof
  JOURNAL   Patent: WO 0077204-A 45 21-DEC-2000;
            University of Iowa Research Foundation (US) ; Lorenz, Eva (US)
FEATURES             Location/Qualifiers
     source          1. .20
                     /organism="Homo sapiens"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:9606"

  Query Match             0.5%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 40;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1351 TTGGGACAACCAGCCTAAAG 1370
              ||||||||||||||||||||
Db         20 TTGGGACAACCAGCCTAAAG 1
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RESULT 41
AX057511/c
LOCUS       AX057511                  20 bp    DNA     linear   PAT 17-JAN-2001
DEFINITION  Sequence 47 from Patent WO0077204.
ACCESSION   AX057511
VERSION     AX057511.1  GI:12310245
KEYWORDS    .
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1
  AUTHORS   Lorenz,E., Schwartz,D.A. and Schutte,B.C.
  TITLE     Variant tlr4 nucleic acid and uses thereof
  JOURNAL   Patent: WO 0077204-A 47 21-DEC-2000;
            University of Iowa Research Foundation (US) ; Lorenz, Eva (US)
FEATURES             Location/Qualifiers
     source          1. .20
                     /organism="Homo sapiens"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:9606"

  Query Match             0.5%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 40;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1568 TGGCTTGTCCAGTCTCGAAG 1587
              ||||||||||||||||||||
Db         20 TGGCTTGTCCAGTCTCGAAG 1


RESULT 42
AX057512/c
LOCUS       AX057512                  20 bp    DNA     linear   PAT 17-JAN-2001
DEFINITION  Sequence 48 from Patent WO0077204.
ACCESSION   AX057512
VERSION     AX057512.1  GI:12310246
KEYWORDS    .
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1
  AUTHORS   Lorenz,E., Schwartz,D.A. and Schutte,B.C.
  TITLE     Variant tlr4 nucleic acid and uses thereof
  JOURNAL   Patent: WO 0077204-A 48 21-DEC-2000;
            University of Iowa Research Foundation (US) ; Lorenz, Eva (US)
FEATURES             Location/Qualifiers
     source          1. .20
                     /organism="Homo sapiens"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:9606"

  Query Match             0.5%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 40;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1656 TTGACCTTCCTGGACCTCTC 1675
              ||||||||||||||||||||
Db         20 TTGACCTTCCTGGACCTCTC 1


RESULT 43
AX057513/c
LOCUS       AX057513                  20 bp    DNA     linear   PAT 17-JAN-2001
DEFINITION  Sequence 49 from Patent WO0077204.
ACCESSION   AX057513
VERSION     AX057513.1  GI:12310247
KEYWORDS    .
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1
  AUTHORS   Lorenz,E., Schwartz,D.A. and Schutte,B.C.
  TITLE     Variant tlr4 nucleic acid and uses thereof
  JOURNAL   Patent: WO 0077204-A 49 21-DEC-2000;
            University of Iowa Research Foundation (US) ; Lorenz, Eva (US)
FEATURES             Location/Qualifiers
     source          1. .20
                     /organism="Homo sapiens"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:9606"

  Query Match             0.5%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 40;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1788 TGTCTGAACTCCCTCCAGGT 1807
              ||||||||||||||||||||
Db         20 TGTCTGAACTCCCTCCAGGT 1


RESULT 44
AX057514/c
LOCUS       AX057514                  20 bp    DNA     linear   PAT 17-JAN-2001
DEFINITION  Sequence 50 from Patent WO0077204.
ACCESSION   AX057514
VERSION     AX057514.1  GI:12310248
KEYWORDS    .
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1
  AUTHORS   Lorenz,E., Schwartz,D.A. and Schutte,B.C.
  TITLE     Variant tlr4 nucleic acid and uses thereof
  JOURNAL   Patent: WO 0077204-A 50 21-DEC-2000;
            University of Iowa Research Foundation (US) ; Lorenz, Eva (US)
FEATURES             Location/Qualifiers
     source          1. .20
                     /organism="Homo sapiens"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:9606"

  Query Match             0.5%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 40;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1947 AAGGACCAGAGGCAGCTCTT 1966
              ||||||||||||||||||||
Db         20 AAGGACCAGAGGCAGCTCTT 1


RESULT 45
AX057515/c
LOCUS       AX057515                  20 bp    DNA     linear   PAT 17-JAN-2001
DEFINITION  Sequence 51 from Patent WO0077204.
ACCESSION   AX057515
VERSION     AX057515.1  GI:12310249
KEYWORDS    .
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1
  AUTHORS   Lorenz,E., Schwartz,D.A. and Schutte,B.C.
  TITLE     Variant tlr4 nucleic acid and uses thereof
  JOURNAL   Patent: WO 0077204-A 51 21-DEC-2000;
            University of Iowa Research Foundation (US) ; Lorenz, Eva (US)
FEATURES             Location/Qualifiers
     source          1. .20
                     /organism="Homo sapiens"
                     /mol_type="unassigned DNA"
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                    /db_xref="taxon:9606"

  Query Match              0.5%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 40;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2074 CGGTCCTCAGTGTGCTTGTA 2093
              ||||||||||||||||||||
Db         20 CGGTCCTCAGTGTGCTTGTA 1


RESULT 46
AX057516/c
LOCUS       AX057516                  20 bp    DNA     linear   PAT 17-JAN-2001
DEFINITION  Sequence 52 from Patent WO0077204.
ACCESSION   AX057516
VERSION     AX057516.1  GI:12310250
KEYWORDS    .
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1
  AUTHORS   Lorenz,E., Schwartz,D.A. and Schutte,B.C.
  TITLE     Variant tlr4 nucleic acid and uses thereof
  JOURNAL   Patent: WO 0077204-A 52 21-DEC-2000;
            University of Iowa Research Foundation (US) ; Lorenz, Eva (US)
FEATURES             Location/Qualifiers
     source          1. .20
                     /organism="Homo sapiens"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:9606"

  Query Match              0.5%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 40;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2142 CTTCTTGCTGGCTGCATAAA 2161
              ||||||||||||||||||||
Db         20 CTTCTTGCTGGCTGCATAAA 1


RESULT 47
AX057517/c
LOCUS       AX057517                  20 bp    DNA     linear   PAT 17-JAN-2001
DEFINITION  Sequence 53 from Patent WO0077204.
ACCESSION   AX057517
VERSION     AX057517.1  GI:12310251
KEYWORDS    .
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1
  AUTHORS   Lorenz,E., Schwartz,D.A. and Schutte,B.C.
  TITLE     Variant tlr4 nucleic acid and uses thereof
  JOURNAL   Patent: WO 0077204-A 53 21-DEC-2000;
            University of Iowa Research Foundation (US) ; Lorenz, Eva (US)
FEATURES             Location/Qualifiers
     source          1. .20
                     /organism="Homo sapiens"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:9606"

  Query Match              0.5%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 40;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2250 TTAGAAGAAGGGGTGCCTCC 2269
              ||||||||||||||||||||
Db         20 TTAGAAGAAGGGGTGCCTCC 1


RESULT 48
AX057518/c
LOCUS       AX057518                  20 bp    DNA     linear   PAT 17-JAN-2001
DEFINITION  Sequence 54 from Patent WO0077204.
ACCESSION   AX057518
VERSION     AX057518.1  GI:12310252
KEYWORDS    .
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1
  AUTHORS   Lorenz,E., Schwartz,D.A. and Schutte,B.C.
  TITLE     Variant tlr4 nucleic acid and uses thereof
  JOURNAL   Patent: WO 0077204-A 54 21-DEC-2000;
            University of Iowa Research Foundation (US) ; Lorenz, Eva (US)
FEATURES             Location/Qualifiers
     source          1. .20
                     /organism="Homo sapiens"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:9606"

  Query Match              0.5%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 40;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2380 AGCACTTCATCCAGAGCCGC 2399
              ||||||||||||||||||||
Db         20 AGCACTTCATCCAGAGCCGC 1


RESULT 49
AX057519/c
LOCUS       AX057519                  20 bp    DNA     linear   PAT 17-JAN-2001
DEFINITION  Sequence 55 from Patent WO0077204.
ACCESSION   AX057519
VERSION     AX057519.1  GI:12310253
KEYWORDS    .
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1
  AUTHORS   Lorenz,E., Schwartz,D.A. and Schutte,B.C.
  TITLE     Variant tlr4 nucleic acid and uses thereof
  JOURNAL   Patent: WO 0077204-A 55 21-DEC-2000;
            University of Iowa Research Foundation (US) ; Lorenz, Eva (US)
FEATURES             Location/Qualifiers
     source          1. .20
                     /organism="Homo sapiens"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:9606"

  Query Match              0.5%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 40;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2484 GTGGAGAAGACCCTGCTCAG 2503
              ||||||||||||||||||||
Db         20 GTGGAGAAGACCCTGCTCAG 1


RESULT 50
AX057520/c
LOCUS       AX057520                  20 bp    DNA     linear   PAT 17-JAN-2001
DEFINITION  Sequence 56 from Patent WO0077204.
ACCESSION   AX057520
VERSION     AX057520.1  GI:12310254
KEYWORDS    .
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
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REFERENCE   1
  AUTHORS   Lorenz,E., Schwartz,D.A. and Schutte,B.C.
  TITLE     Variant tlr4 nucleic acid and uses thereof
  JOURNAL   Patent: WO 0077204-A 56 21-DEC-2000;
            University of Iowa Research Foundation (US) ; Lorenz, Eva (US)
FEATURES             Location/Qualifiers
     source          1. .20
                     /organism="Homo sapiens"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:9606"

  Query Match             0.5%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 40;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2659 ATTGGCAGGAAGCAACATCT 2678
              ||||||||||||||||||||
Db         20 ATTGGCAGGAAGCAACATCT 1


RESULT 51
AX057521/c
LOCUS       AX057521                  20 bp    DNA     linear   PAT 17-JAN-2001
DEFINITION  Sequence 57 from Patent WO0077204.
ACCESSION   AX057521
VERSION     AX057521.1  GI:12310255
KEYWORDS    .
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1
  AUTHORS   Lorenz,E., Schwartz,D.A. and Schutte,B.C.
  TITLE     Variant tlr4 nucleic acid and uses thereof
  JOURNAL   Patent: WO 0077204-A 57 21-DEC-2000;
            University of Iowa Research Foundation (US) ; Lorenz, Eva (US)
FEATURES             Location/Qualifiers
     source          1. .20
                     /organism="Homo sapiens"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:9606"

  Query Match             0.5%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 40;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2590 GACGACTCAGAAAAGCCCTG 2609
              ||||||||||||||||||||
Db         20 GACGACTCAGAAAAGCCCTG 1


RESULT 52
AX057522/c
LOCUS       AX057522                  20 bp    DNA     linear   PAT 17-JAN-2001
DEFINITION  Sequence 58 from Patent WO0077204.
ACCESSION   AX057522
VERSION     AX057522.1  GI:12310256
KEYWORDS    .
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1
  AUTHORS   Lorenz,E., Schwartz,D.A. and Schutte,B.C.
  TITLE     Variant tlr4 nucleic acid and uses thereof
  JOURNAL   Patent: WO 0077204-A 58 21-DEC-2000;
            University of Iowa Research Foundation (US) ; Lorenz, Eva (US).
FEATURES             Location/Qualifiers
     source          1. .20
                     /organism="Homo sapiens"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:9606"

  Query Match             0.5%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 40;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2725 CTGGGTCCAACACTTGTTCA 2744
              ||||||||||||||||||||
Db         20 CTGGGTCCAACACTTGTTCA 1


RESULT 53
AX057524
LOCUS       AX057524                  20 bp    DNA     linear   PAT 17-JAN-2001
DEFINITION  Sequence 60 from Patent WO0077204.
ACCESSION   AX057524
VERSION     AX057524.1  GI:12310258
KEYWORDS    .
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1
  AUTHORS   Lorenz,E., Schwartz,D.A. and Schutte,B.C.
  TITLE     Variant tlr4 nucleic acid and uses thereof
  JOURNAL   Patent: WO 0077204-A 60 21-DEC-2000;
            University of Iowa Research Foundation (US) ; Lorenz, Eva (US)
FEATURES             Location/Qualifiers
     source          1. .20
                     /organism="Homo sapiens"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:9606"

  Query Match             0.5%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 40;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy         15 GCTCACAGAAGCAGTGAGGA 34
              ||||||||||||||||||||
Db          1 GCTCACAGAAGCAGTGAGGA 20


RESULT 54
AX057525/c
LOCUS       AX057525                  20 bp    DNA     linear   PAT 17-JAN-2001
DEFINITION  Sequence 61 from Patent WO0077204.
ACCESSION   AX057525
VERSION     AX057525.1  GI:12310259
KEYWORDS    .
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1
  AUTHORS   Lorenz,E., Schwartz,D.A. and Schutte,B.C.
  TITLE     Variant tlr4 nucleic acid and uses thereof
  JOURNAL   Patent: WO 0077204-A 61 21-DEC-2000;
            University of Iowa Research Foundation (US) ; Lorenz, Eva (US)
FEATURES             Location/Qualifiers
     source          1. .20
                     /organism="Homo sapiens"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:9606"

  Query Match             0.5%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 40;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        448 ATGGGGCATATCAGAGCCTA 467
              ||||||||||||||||||||
Db         20 ATGGGGCATATCAGAGCCTA 1


RESULT 55
AX752002
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LOCUS       AX752002                  20 bp    DNA     linear   PAT 20-JUN-2003
DEFINITION  Sequence 3 from Patent WO03035110.
ACCESSION   AX752002
VERSION     AX752002.1  GI:32134125
KEYWORDS    .
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            other sequences; artificial sequences.
REFERENCE   1
  AUTHORS   Arditi,M., Rajavashisth,T. and Shah,P.K.
  TITLE     Treating vascular disease by inhibiting Toll-like receptor-4
  JOURNAL   Patent: WO 03035110-A 3 01-MAY-2003;
            CEDARS-SINAI MEDICAL CENTER (US)
FEATURES             Location/Qualifiers
     source          1. .20
                     /organism="synthetic construct"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:32630"
                     /note="Primer"

  Query Match             0.5%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 40;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1768 TGGATACGTTTCCTTATAAG 1787
              ||||||||||||||||||||
Db          1 TGGATACGTTTCCTTATAAG 20


RESULT 56
BD102553
LOCUS       BD102553                  20 bp    DNA     linear   PAT 27-AUG-2002
DEFINITION  TLR/CD14 binding inhibitor.
ACCESSION   BD102553
VERSION     BD102553.1  GI:22648127
KEYWORDS    WO 0172993-A/6.
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            other sequences; artificial sequences.
REFERENCE   1  (bases 1 to 20)
  AUTHORS   Furusako,S., Mori,S., Shirakawa,K. and Takahashi,T.
  TITLE     TLR/CD14 binding inhibitor
  JOURNAL   Patent: WO 0172993-A 6 04-OCT-2001;
            MOCHIDA PHARMACEUTICAL CO LTD,SHOJI FURUSAKO,SADAO MORI, KAMON
            SHIRAKAWA, TOMOHIRO TAKAHASHI
COMMENT     OS   Artificial Sequence
            PN   WO 0172993-A/6
            PD   04-OCT-2001
            PF   02-APR-2001 WO 2001JP002869
            PR   31-MAR-2000 JP 00P    99617,22-NOV-2000 JP 00P   356719 PR
            28-MAR-2001 US    09/806158
            PI   SHOJI FURUSAKO,SADAO MORI,KAMON SHIRAKAWA,TOMOHIRO TAKAHASHI
            PC   C12N15/00,C07K7/08,C07K14/705,C07K16/28,A61K45/00,A61P31/04,
            PC   A61P38/02,
            PC   A61P39/395,A61P43/00,G01N33/15,G01N33/50,G01N33/53,G01N33/577
            CC   TLR/CD14 binding inhibitor
            FH   Key             Location/Qualifiers
            FT   source          1. .20
            FT                   /organism='Artificial Sequence'.
FEATURES             Location/Qualifiers
     source          1. .20
                     /organism="synthetic construct"
                     /mol_type="genomic DNA"
                     /db_xref="taxon:32630"

  Query Match             0.5%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 40;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        501 CCCATCCAGAGTTTAGCCCT 520
              ||||||||||||||||||||
Db          1 CCCATCCAGAGTTTAGCCCT 20


RESULT 57
AX057482
LOCUS       AX057482                  19 bp    DNA     linear   PAT 17-JAN-2001
DEFINITION  Sequence 18 from Patent WO0077204.
ACCESSION   AX057482
VERSION     AX057482.1  GI:12310216
KEYWORDS    .
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1
  AUTHORS   Lorenz,E., Schwartz,D.A. and Schutte,B.C.
  TITLE     Variant tlr4 nucleic acid and uses thereof
  JOURNAL   Patent: WO 0077204-A 18 21-DEC-2000;
            University of Iowa Research Foundation (US) ; Lorenz, Eva (US)
FEATURES             Location/Qualifiers
     source          1. .19
                     /organism="Homo sapiens"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:9606"

  Query Match             0.5%;  Score 19;  DB 1;  Length 19;
  Best Local Similarity   100.0%;  Pred. No. 45;
  Matches   19;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        812 CTTTATCCAACCAGGTGCA 830
              |||||||||||||||||||
Db          1 CTTTATCCAACCAGGTGCA 19


RESULT 58
AX752003/c
LOCUS       AX752003                  19 bp    DNA     linear   PAT 20-JUN-2003
DEFINITION  Sequence 4 from Patent WO03035110.
ACCESSION   AX752003
VERSION     AX752003.1  GI:32134126
KEYWORDS    .
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            other sequences; artificial sequences.
REFERENCE   1
  AUTHORS   Arditi,M., Rajavashisth,T. and Shah,P.K.
  TITLE     Treating vascular disease by inhibiting Toll-like receptor-4
  JOURNAL   Patent: WO 03035110-A 4 01-MAY-2003;
            CEDARS-SINAI MEDICAL CENTER (US)
FEATURES             Location/Qualifiers
     source          1. .19
                     /organism="synthetic construct"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:32630"
                     /note="Primer"

  Query Match             0.5%;  Score 19;  DB 1;  Length 19;
  Best Local Similarity   100.0%;  Pred. No. 45;
  Matches   19;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2256 GAAGGGGTGCCTCCATTTC 2274
              |||||||||||||||||||
Db         19 GAAGGGGTGCCTCCATTTC 1


RESULT 59
AX057490
LOCUS       AX057490                  18 bp    DNA     linear   PAT 17-JAN-2001
DEFINITION  Sequence 26 from Patent WO0077204.
ACCESSION   AX057490
VERSION     AX057490.1  GI:12310224
KEYWORDS    .
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
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            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1
  AUTHORS   Lorenz,E., Schwartz,D.A. and Schutte,B.C.
  TITLE     Variant tlr4 nucleic acid and uses thereof
  JOURNAL   Patent: WO 0077204-A 26 21-DEC-2000;
            University of Iowa Research Foundation (US) ; Lorenz, Eva (US)
FEATURES             Location/Qualifiers
     source          1. .18
                     /organism="Homo sapiens"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:9606"

  Query Match             0.5%;  Score 18;  DB 1;  Length 18;
  Best Local Similarity   100.0%;  Pred. No. 51;
  Matches   18;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1763 TTCATTGGATACGTTTCC 1780
              ||||||||||||||||||
Db          1 TTCATTGGATACGTTTCC 18


RESULT 60
BD161176/c
LOCUS       BD161176                 22 bp    DNA     linear   PAT 17-JAN-2003
DEFINITION  Protein participating in mechanism for preventing infection and
            gene encoding the protein.
ACCESSION   BD161176
VERSION     BD161176.1  GI:27866934
KEYWORDS    JP 2002176986-A/14.
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            other sequences; artificial sequences.
REFERENCE   1  (bases 1 to 22)
  AUTHORS   Yoshikai,Y., Matsuguchi,T. and Iwami,K.
  TITLE     Protein participating in mechanism for preventing infection and
            gene encoding the protein
  JOURNAL   Patent: JP 2002176986-A 14 25-JUN-2002;
            NAGOYA INDUSTRIAL SCIENCE RESEARCH INSTITUTE
COMMENT     OS   Artificial Sequence
            PN   JP 2002176986-A/14
            PD   25-JUN-2002
            PF   14-DEC-2000 JP 2000380561
            PI   YASUNOBU YOSHIKAI,TETSUYA MATSUGUCHI,KENICHIRO IWAMI PC
            C12N15/09,C07K14/705,C12N1/15,C12N1/19,C12N1/21,C12N5/10// PC
            C12P21/02,
            PC   (C12N5/10,C12R1:91),C12N15/00,C12N5/00,(C12N5/00,C12R1:91) CC
             Description of Artificial Sequence: PCR primer FH   Key
             Location/Qualifiers
            FT   source          1. .22
            FT                   /organism='Artificial Sequence'.
FEATURES             Location/Qualifiers
     source          1. .22
                     /organism="synthetic construct"
                     /mol_type="genomic DNA"
                     /db_xref="taxon:32630"

  Query Match             0.5%;  Score 17.2;  DB 1;  Length 22;
  Best Local Similarity   86.4%;  Pred. No. 84;
  Matches   19;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       2225 GGTAAGGAATGAGCTAGTAAAG 2246
              ||| || |||||||| ||||||
Db         22 GGTGAGAAATGAGCTGGTAAAG 1


RESULT 61
AR085547/c
LOCUS       AR085547                 20 bp    DNA     linear   PAT 01-SEP-2000
DEFINITION  Sequence 25 from patent US 5981731.
ACCESSION   AR085547
VERSION     AR085547.1  GI:10012314
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 20)
  AUTHORS   Monia,B.P.
  TITLE     Antisense oligonucleotide modulation of B-raf gene expression
  JOURNAL   Patent: US 5981731-A 25 09-NOV-1999;
FEATURES             Location/Qualifiers
     source          1. .20
                     /organism="unknown"
                     /mol_type="unassigned DNA"

  Query Match             0.4%;  Score 17;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 76;
  Matches   17;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1465 TGAAACAAATGAGTGAG 1481
              |||||||||||||||||
Db         20 TGAAACAAATGAGTGAG 4


RESULT 62
AR216067/c
LOCUS       AR216067                 20 bp    DNA     linear   PAT 25-SEP-2002
DEFINITION  Sequence 114 from patent US 6410518.
ACCESSION   AR216067
VERSION     AR216067.1  GI:23314355
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 20)
  AUTHORS   Monia,B.P.
  TITLE     Antisense oligonucleotide inhibition of raf gene expression
  JOURNAL   Patent: US 6410518-A 114 25-JUN-2002;
FEATURES             Location/Qualifiers
     source          1. .20
                     /organism="unknown"
                     /mol_type="genomic DNA"

  Query Match             0.4%;  Score 17;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 76;
  Matches   17;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1465 TGAAACAAATGAGTGAG 1481
              |||||||||||||||||
Db         20 TGAAACAAATGAGTGAG 4


RESULT 63
AR089460/c
LOCUS       AR089460                 20 bp    DNA     linear   PAT 07-SEP-2000
DEFINITION  Sequence 219 from patent US 5994066.
ACCESSION   AR089460
VERSION     AR089460.1  GI:10016217
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 20)
  AUTHORS   Bergeron,M.G., Picard,F.J., Ouellette,M. and Roy,P.H.
  TITLE     Species-specific and universal DNA probes and amplification primers
            to rapidly detect and identify common bacterial pathogens and
            associated antibiotic resistance genes from clinical specimens for
            routine diagnosis in microbiology laboratories
  JOURNAL   Patent: US 5994066-A 219 30-NOV-1999;
FEATURES             Location/Qualifiers
     source          1. .20
                     /organism="unknown"
                     /mol_type="unassigned DNA"

  Query Match             0.4%;  Score 16.8;  DB 1;  Length 20;
  Best Local Similarity   90.0%;  Pred. No. 79;
  Matches   18;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;
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Qy       2378 CCAGCACTTCATCCAGAGCC 2397
              |||||||||||| |||| |
Db         20 CCAGCACTTCATCAAGAGTC 1


RESULT 64
BD022993/c
LOCUS       BD022993                 20 bp    DNA     linear   PAT 27-AUG-2002
DEFINITION  Species-specific, genus-specific and universal probes and primers
            for quickly detecting and identifying common bacterial and fungal
            pathogens and relating antibiotic tolerance genes from clinical
            specimens for diagnosis in microbiological laboratory.
ACCESSION   BD022993
VERSION     BD022993.1  GI:22564216
KEYWORDS    JP 2001504330-A/61.
SOURCE      Streptococcus salivarius
  ORGANISM  Streptococcus salivarius
            Bacteria; Firmicutes; Lactobacillales; Streptococcaceae;
            Streptococcus.
REFERENCE   1  (bases 1 to 20)
  AUTHORS   Bergeron,M.J., Picard,F.G., Weretto,M. and Roy,P.H.
  TITLE     Species-specific, genus-specific and universal probes and primers
            for quickly detecting and identifying common bacterial and fungal
            pathogens and relating antibiotic tolerance genes from clinical
            specimens for diagnosis in microbiological laboratory
  JOURNAL   Patent: JP 2001504330-A 61 03-APR-2001;
            INFECTIO DIAGNOSTICS INC
COMMENT     PN   JP 2001504330-A/61
            PD   03-APR-2001
            PF   04-NOV-1997 JP 1998520907
            PR   04-NOV-1996 US    08/743637
            PI   MICHEL JU BERGERON,FRANCOIS G PICARD,MARC WERETTO,PAUL H ROY
            PC   C12N15/09,C12N1/21,C12Q1/68//(C12Q1/68,C12R1:01),(C12Q1/68, PC
              C12R1:46),
            PC   (C12Q1/68,C12R1:44),(C12Q1/68,C12R1:72),C12N15/00 CC
            Strandedness: Single;
            CC   Topology: Linear;
            FH   Key             Location/Qualifiers.
FEATURES              Location/Qualifiers
     source           1. .20
                      /organism="Streptococcus salivarius"
                      /mol_type="genomic DNA"
                      /db_xref="taxon:1304"

  Query Match             0.4%;  Score 16.8;  DB 1;  Length 20;
  Best Local Similarity   90.0%;  Pred. No. 79;
  Matches   18;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       2378 CCAGCACTTCATCCAGAGCC 2397
              |||||||||||| |||| |
Db         20 CCAGCACTTCATCAAGAGTC 1


RESULT 65
A83595
LOCUS       A83595                   20 bp    DNA     linear   PAT 21-JAN-2000
DEFINITION  Sequence 24 from Patent WO9849324.
ACCESSION   A83595
VERSION     A83595.1  GI:6732851
KEYWORDS    .
SOURCE      unidentified
  ORGANISM  unidentified
            unclassified.
REFERENCE   1  (bases 1 to 20)
  AUTHORS   Matthijs,G.
  TITLE     CARBOHYDRATE-DEFICIENT GLYCOPROTEIN SYNDROME TYPE I
  JOURNAL   Patent: WO 9849324-A 24 05-NOV-1998;
            MATTHIJS GERT (BE); GENZYME LTD (GB)
FEATURES              Location/Qualifiers
     source           1. .20
                      /organism="unidentified"
                      /mol_type="unassigned DNA"
                      /db_xref="taxon:32644"

  Query Match             0.4%;  Score 16.4;  DB 1;  Length 20;
  Best Local Similarity   94.4%;  Pred. No. 86;
  Matches   17;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1640 CACAGAGCTGAGAAACTT 1657
              |||||||||||||||| |
Db          2 CACAGAGCTGAGAAACAT 19


RESULT 66
AR226133/c
LOCUS       AR226133                 20 bp    DNA     linear   PAT 20-DEC-2002
DEFINITION  Sequence 14 from patent US 6444466.
ACCESSION   AR226133
VERSION     AR226133.1  GI:27264287
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 20)
  AUTHORS   Ward,D.T. and Watt,A.T.
  TITLE     Antisense modulation of helicase-moi expression
  JOURNAL   Patent: US 6444466-A 14 03-SEP-2002;
FEATURES              Location/Qualifiers
     source           1. .20
                      /organism="unknown"
                      /mol_type="genomic DNA"

  Query Match             0.4%;  Score 16.4;  DB 1;  Length 20;
  Best Local Similarity   94.4%;  Pred. No. 86;
  Matches   17;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        613 AAACTTTGAAAGAACTTA 630
              ||||| ||||||||||||
Db         19 AAACTCTGAAAGAACTTA 2


RESULT 67
AR097024/c
LOCUS       AR097024                 21 bp    DNA     linear   PAT 14-FEB-2001
DEFINITION  Sequence 87 from patent US 6071515.
ACCESSION   AR097024
VERSION     AR097024.1  GI:12805754
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 21)
  AUTHORS   Mezes,P.S., Richard,R.A., Affholter,J.A. and Kotite,N.J.
  TITLE     Dimer and multimer forms of single chain polypeptides
  JOURNAL   Patent: US 6071515-A 87 06-JUN-2000;
FEATURES              Location/Qualifiers
     source           1. .21
                      /organism="unknown"
                      /mol_type="unassigned DNA"

  Query Match             0.4%;  Score 16.2;  DB 1;  Length 21;
  Best Local Similarity   85.7%;  Pred. No. 96;
  Matches   18;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       2683 GAAGAGGAAAAATAAAAACCT 2703
              || || || ||||||||||||
Db         21 GATGATGACAAATAAAAACCT 1


RESULT 68
AR137361/c
LOCUS       AR137361                 21 bp    DNA     linear   PAT 16-JUN-2001
DEFINITION  Sequence 108 from patent US 6197505.
ACCESSION   AR137361
VERSION     AR137361.1  GI:14478870
```

```
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 21)
  AUTHORS   Norberg,L.Torbjorn., Andersson,M.Kristina. and
            Lindstrom,P.Harry.Rutger.
  TITLE     Methods for assessing cardiovascular status and compositions for
            use thereof
  JOURNAL   Patent: US 6197505-A 108 06-MAR-2001;
FEATURES             Location/Qualifiers
     source          1. .21
                     /organism="unknown"
                     /mol_type="unassigned DNA"

  Query Match             0.4%;  Score 16.2;  DB 1;  Length 21;
  Best Local Similarity   85.7%;  Pred. No. 96;
  Matches   18;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy         27 AGTGAGGATGATGCCAGGATG 47
              ||||||| ||||||||| | |
Db         21 AGTGAGGTTGATGCCAGAAAG 1


RESULT 69
BD231344/c
LOCUS       BD231344                 21 bp    DNA     linear   PAT 17-JUL-2003
DEFINITION  Genes for assessing cardiovascular status and compositions for use
            thereof.
ACCESSION   BD231344
VERSION     BD231344.1  GI:33041114
KEYWORDS    JP 2002527079-A/108.
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            other sequences; artificial sequences.
REFERENCE   1  (bases 1 to 21)
  AUTHORS   Norberg,L.T., Andersson,M.K., Lindstrom,P.H.R. and Jonsson,L.
  TITLE     Genes for assessing cardiovascular status and compositions for use
            thereof
  JOURNAL   Patent: JP 2002527079-A 108 27-AUG-2002;
            PAIROSEAKENSINGU AB
COMMENT     OS   Artificial Sequence
            PN   JP 2002527079-A/108
            PD   27-AUG-2002
            PF   13-OCT-1999 JP 2000576056
            PR   14-OCT-1998 US    60/104286,14-OCT-1998 US    60/104302 PI
            LEIF TORBJORN NORBERG,MARIA KRISTINA ANDERSSON,PER HARRY  PI
            RUTGER LINDSTROM,
            PI   LENA JONSSON
            PC   C12Q1/68,C12N15/09//G01N33/53,G01N33/566,C12N15/00 CC   Genes
            for assessing cardiovascular status
            and compositions for
            CC             use thereof
            FH   Key             Location/Qualifiers
            FT   source          1. .21
            FT                   /organism='Artificial Sequence'.
FEATURES             Location/Qualifiers
     source          1. .21
                     /organism="synthetic construct"
                     /mol_type="genomic DNA"
                     /db_xref="taxon:32630"

  Query Match             0.4%;  Score 16.2;  DB 1;  Length 21;
  Best Local Similarity   85.7%;  Pred. No. 96;
  Matches   18;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy         27 AGTGAGGATGATGCCAGGATG 47
              ||||||| ||||||||| | |
Db         21 AGTGAGGTTGATGCCAGAAAG 1


RESULT 70
CQ787005/c
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```
LOCUS       CQ787005                 21 bp    DNA     linear   PAT 24-MAR-2004
DEFINITION  Sequence 11 from Patent WO2004020661.
ACCESSION   CQ787005
VERSION     CQ787005.1  GI:45721988
KEYWORDS    .
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            other sequences; artificial sequences.
REFERENCE   1
  AUTHORS   Sendtner,M. and Boemmel,H.
  TITLE     Test system for the discovery of active agents in nerve cell
            diseases
  JOURNAL   Patent: WO 2004020661-A 11 11-MAR-2004;
            MedInnova Gesellschaft fuer Medizinische Innovation en aus
            Akademischer Forschung mbH (DE)
FEATURES             Location/Qualifiers
     source          1. .21
                     /organism="synthetic construct"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:32630"
                     /note="Primer"

  Query Match             0.4%;  Score 16.2;  DB 1;  Length 21;
  Best Local Similarity   85.7%;  Pred. No. 96;
  Matches   18;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        342 GACCTGAGCTTTAATCCCCTG 362
              |||||||| || ||||||| |
Db         21 GACCTGAGTTTGAATCCCCAG 1


RESULT 71
E35929/c
LOCUS       E35929                   21 bp    DNA     linear   PAT 31-JAN-2002
DEFINITION  Method for detecting Kawasaki disease factor.
ACCESSION   E35929
VERSION     E35929.1  GI:18624640
KEYWORDS    JP 2000157297-A/20.
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            other sequences; artificial sequences.
REFERENCE   1  (bases 1 to 21)
  AUTHORS   Yoshioka,T. and Suzuki,R.
  TITLE     Method for detecting Kawasaki disease factor
  JOURNAL   Patent: JP 2000157297-A 20 13-JUN-2000;
            SHIONOGI & CO LTD
COMMENT     OS   Artificial Sequence
            PN   JP 2000157297-A/20
            PD   13-JUN-2000
            PF   01-DEC-1998 JP 1998341661
            PR
            PI   TAKESHI YOSHIOKA,RYUJI SUZUKI
            PC   C12Q1/68,C12N15/09,G01N33/48,C12N15/00
            CC
            FH   Key             Location/Qualifiers
            FT   source          1. .21
            FT                   /organism='Artificial Sequence'.
FEATURES             Location/Qualifiers
     source          1. .21
                     /organism="synthetic construct"
                     /mol_type="genomic DNA"
                     /db_xref="taxon:32630"

  Query Match             0.4%;  Score 16.2;  DB 1;  Length 21;
  Best Local Similarity   85.7%;  Pred. No. 96;
  Matches   18;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        409 TGCTGGATTTATCCAGGTGTG 429
              ||||||||||||| |  ||||
Db         21 TGCTGGATTTATCGACCTGTG 1


RESULT 72
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AR233713
LOCUS       AR233713                 21 bp    DNA     linear   PAT 20-DEC-2002
DEFINITION  Sequence 75 from patent US 6458536.
ACCESSION   AR233713
VERSION     AR233713.1  GI:27276337
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 21)
  AUTHORS   Gatti,R.A.
  TITLE     Modified SSCP method using sequential electrophoresis of multiple
            nucleic acid segments
  JOURNAL   Patent: US 6458536-A 75 01-OCT-2002;
FEATURES             Location/Qualifiers
     source          1. .21
                     /organism="unknown"
                     /mol_type="genomic DNA"

  Query Match             0.4%;  Score 16.2;  DB 1;  Length 21;
  Best Local Similarity   85.7%;  Pred. No. 96;
  Matches   18;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1842 AAAAAACAGGAACTACAGCAT 1862
              ||||||||||||  |||| ||
Db          1 AAAAAACAGGAAGAACAGGAT 21


RESULT 73
AR367361/c
LOCUS       AR367361                 21 bp    DNA     linear   PAT 12-SEP-2003
DEFINITION  Sequence 87 from patent US 6329507.
ACCESSION   AR367361
VERSION     AR367361.1  GI:34600438
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 21)
  AUTHORS   Mezes,P.S., Richard,R.A., Affholter,J.A. and Kotite,N.J.
  TITLE     Dimer and multimer forms of single chain polypeptides
  JOURNAL   Patent: US 6329507-A 87 11-DEC-2001;
FEATURES             Location/Qualifiers
     source          1. .21
                     /organism="unknown"
                     /mol_type="genomic DNA"

  Query Match             0.4%;  Score 16.2;  DB 1;  Length 21;
  Best Local Similarity   85.7%;  Pred. No. 96;
  Matches   18;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       2683 GAAGAGGAAAAATAAAAACCT 2703
              || || || ||||||||||||
Db         21 GATGATGACAAATAAAAACCT 1


RESULT 74
AX037483/c
LOCUS       AX037483                 21 bp    DNA     linear   PAT 16-NOV-2000
DEFINITION  Sequence 108 from Patent WO0056922.
ACCESSION   AX037483
VERSION     AX037483.1  GI:11226910
KEYWORDS    .
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            other sequences; artificial sequences.
REFERENCE   1
  AUTHORS   Norberg,L.T., Olaisson,E., Jonsson,L., Lindstrom,P.H. and
            Sanders,R.
  TITLE     Genetic polymorphism and polymorphic pattern for assessing disease
            status, and compositions for use thereof
  JOURNAL   Patent: WO 0056922-A 108 28-SEP-2000;
            NORBERG LEIF TORBJORN (SE) ; OLAISSON ERIK (SE) ; JONSSON LENA (SE)
            ; GEMINI GENOMICS AB (SE) ; LINDSTROM PER HARRY RUTGER (SE) ;
            SANDERS RHIANNON (SE)
FEATURES             Location/Qualifiers
     source          1. .21
                     /organism="synthetic construct"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:32630"
                     /note="Oligonucleotide primer"

  Query Match             0.4%;  Score 16.2;  DB 1;  Length 21;
  Best Local Similarity   85.7%;  Pred. No. 96;
  Matches   18;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy         27 AGTGAGGATGATGCCAGGATG 47
              ||||||| ||||||||| | |
Db         21 AGTGAGGTTGATGCCAGAAAG 1


RESULT 75
BD075235/c
LOCUS       BD075235                 21 bp    DNA     linear   PAT 27-AUG-2002
DEFINITION  Methods for assessing cardiovascular status and compositions for
            use thereof.
ACCESSION   BD075235
VERSION     BD075235.1  GI:22620838
KEYWORDS    JP 2001519660-A/108.
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            other sequences; artificial sequences.
REFERENCE   1  (bases 1 to 21)
  AUTHORS   Norberg,L.T., Andersson,M.K. and Lindstrom,P.H.R.
  TITLE     Methods for assessing cardiovascular status and compositions for
            use thereof
  JOURNAL   Patent: JP 2001519660-A 108 23-OCT-2001;
            EURONA MEDICAL AB
COMMENT     OS   Artificial Sequence
            PN   JP 2001519660-A/108
            PD   23-OCT-2001
            PF   01-APR-1998 JP 1998542530
            PR   04-APR-1997 US    60/042930
            PI   LEIF TORBJORN NORBERG,MARIA KRISTINA ANDERSSON,PER HARRY  PI
            RUTGER LINDSTROM
            PC   C12Q1/68,C07K14/72,C07K14/575,C12N9/48
            CC   Description of Artificial Sequence: PCR PRIMER FH   Key
                 Location/Qualifiers
            FT   source          1. .21
            FT                   /organism='Artificial Sequence'.
FEATURES             Location/Qualifiers
     source          1. .21
                     /organism="synthetic construct"
                     /mol_type="genomic DNA"
                     /db_xref="taxon:32630"

  Query Match             0.4%;  Score 16.2;  DB 1;  Length 21;
  Best Local Similarity   85.7%;  Pred. No. 96;
  Matches   18;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy         27 AGTGAGGATGATGCCAGGATG 47
              ||||||| ||||||||| | |
Db         21 AGTGAGGTTGATGCCAGAAAG 1


RESULT 76
AB086505/c
LOCUS       AB086505                 21 bp    DNA     linear   SYN 21-MAY-2003
DEFINITION  Synthetic construct DNA, forward primer for Japanese flounder
            microsatellite sequence Poli111TUF.
ACCESSION   AB086505
VERSION     AB086505.1  GI:28804357
KEYWORDS    .
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            other sequences; artificial sequences.
```

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REFERENCE   1
  AUTHORS   Coimbra,M.R.M., Kobayashi,K., Koretsugu,S., Hasegawa,O., Ohara,E.,
            Ozaki,A., Sakamoto,T., Naruse,K. and Okamoto,N.
  TITLE     A genetic linkage map of the Japanease Flounder, (Paralichthys
            olivaceus)
  JOURNAL   Unpublished
REFERENCE   2  (bases 1 to 21)
  AUTHORS   Coimbra,M.R.M., Kobayashi,K., Koretsugu,S., Hasegawa,O., Ohara,E.,
            Ozaki,A., Sakamoto,T., Naruse,K. and Okamoto,N.
  TITLE     Direct Submission
  JOURNAL   Submitted (14-JUN-2002) Nobuaki Okamoto, Tokyo University of
            Fisheries, Department of Aquatic Biosciences; 4-5-7 Konan,
            Minato-ku, Tokyo 108-8477, Japan
            (E-mail:nokamoto@tokyo-u-fish.ac.jp, Tel:81-3-5463-0547,
            Fax:81-3-5463-0552)
FEATURES             Location/Qualifiers
     source          1. .21
                     /organism="synthetic construct"
                     /mol_type="genomic DNA"
                     /db_xref="taxon:32630"
     misc_feature    1. .21
                     /note="forward primer for Japanese flounder microsatellite
                     sequence Poli111TUF"

  Query Match             0.4%;  Score 16.2;  DB 1;  Length 21;
  Best Local Similarity   85.7%;  Pred. No. 96;
  Matches   18;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       2522 CCGCCTTCTCAGCAGGAACAC 2542
              || ||| |||||||| |||||
Db         21 CCTCCTGCTCAGCAGTAACAC 1


RESULT 77
AR224651/c
LOCUS       AR224651                  20 bp    DNA     linear   PAT 26-SEP-2002
DEFINITION  Sequence 110 from patent US 6440738.
ACCESSION   AR224651
VERSION     AR224651.1  GI:23333491
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 20)
  AUTHORS   Wyatt,J.
  TITLE     Antisense modulation of casein kinase 2-beta expression
  JOURNAL   Patent: US 6440738-A 110 27-AUG-2002;
FEATURES             Location/Qualifiers
     source          1. .20
                     /organism="unknown"
                     /mol_type="genomic DNA"

  Query Match             0.4%;  Score 16;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 93;
  Matches   16;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        988 CTGCTCTAGAGGGCCT 1003
              ||||||||||||||||
Db         16 CTGCTCTAGAGGGCCT 1


RESULT 78
AR111824
LOCUS       AR111824                  19 bp    DNA     linear   PAT 14-FEB-2001
DEFINITION  Sequence 28 from patent US 6127521.
ACCESSION   AR111824
VERSION     AR111824.1  GI:12828672
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 19)
  AUTHORS   Berlin,V., Chiu,M.Isabel., Cottarel,G. and Damagnez,V.
  TITLE     Immunosuppressant target proteins
  JOURNAL   Patent: US 6127521-A 28 03-OCT-2000;
FEATURES             Location/Qualifiers
     source          1. .19
                     /organism="unknown"
                     /mol_type="unassigned DNA"

  Query Match             0.4%;  Score 15.8;  DB 1;  Length 19;
  Best Local Similarity   89.5%;  Pred. No. 89;
  Matches   17;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       3689 GAGTTGCAGCAGATGTTTA 3707
              |||||  ||||||||||||
Db          1 GAGTTTGAGCAGATGTTTA 19


RESULT 79
AR236272
LOCUS       AR236272                  19 bp    DNA     linear   PAT 20-DEC-2002
DEFINITION  Sequence 28 from patent US 6464974.
ACCESSION   AR236272
VERSION     AR236272.1  GI:27280093
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 19)
  AUTHORS   Berlin,V., Chiu,M.I., Cottarel,G. and Damagnez,V.
  TITLE     Immunosuppressant target proteins
  JOURNAL   Patent: US 6464974-A 28 15-OCT-2002;
FEATURES             Location/Qualifiers
     source          1. .19
                     /organism="unknown"
                     /mol_type="genomic DNA"

  Query Match             0.4%;  Score 15.8;  DB 1;  Length 19;
  Best Local Similarity   89.5%;  Pred. No. 89;
  Matches   17;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       3689 GAGTTGCAGCAGATGTTTA 3707
              |||||  ||||||||||||
Db          1 GAGTTTGAGCAGATGTTTA 19


RESULT 80
AR275546
LOCUS       AR275546                  19 bp    DNA     linear   PAT 10-APR-2003
DEFINITION  Sequence 28 from patent US 6509152.
ACCESSION   AR275546
VERSION     AR275546.1  GI:29708964
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 19)
  AUTHORS   Berlin,V., Chiu,M.I., Cottarel,G. and Damagnez,V.
  TITLE     Immunosuppressant target proteins
  JOURNAL   Patent: US 6509152-A 28 21-JAN-2003;
FEATURES             Location/Qualifiers
     source          1. .19
                     /organism="unknown"
                     /mol_type="genomic DNA"

  Query Match             0.4%;  Score 15.8;  DB 1;  Length 19;
  Best Local Similarity   89.5%;  Pred. No. 89;
  Matches   17;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       3689 GAGTTGCAGCAGATGTTTA 3707
              |||||  ||||||||||||
Db          1 GAGTTTGAGCAGATGTTTA 19


RESULT 81
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AX795182
LOCUS       AX795182                 19 bp    DNA     linear   PAT 04-OCT-2003
DEFINITION  Sequence 12 from Patent EP1323825.
ACCESSION   AX795182
VERSION     AX795182.1  GI:37515943
KEYWORDS    .
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            other sequences; artificial sequences.
REFERENCE   1
  AUTHORS   Giuliano,G., Rosati,C., Dharmapuri,S., Pallara,P. and Camara,B.
  TITLE     Recombinant plants and dna constructs
  JOURNAL   Patent: EP 1323825-A 12 02-JUL-2003;
            ENEA ENTE PER LE NUOVE TECNOLOGIE, L'ENERGIA E L'AMBIENTE (IT) ;
            Biogen S.r.l. (IT)
FEATURES             Location/Qualifiers
     source          1. .19
                     /organism="synthetic construct"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:32630"
                     /note="Downstream primer used to detect the expression of
                     the Phytoene desaturase gene by RT-PCR"
     primer_bind     1. .19
                     /note="Pds Downstream Primer"

  Query Match             0.4%;  Score 15.8;  DB 1;  Length 19;
  Best Local Similarity   89.5%;  Pred. No. 89;
  Matches   17;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1716 TCACTCTCCAGTCTTCAGG 1734
              || || ||||||||||||||
Db          1 TCTCTTTCCAGTCTTCAGG 19


RESULT 82
AR058876
LOCUS       AR058876                 20 bp    DNA     linear   PAT 29-SEP-1999
DEFINITION  Sequence 8 from patent US 5837835.
ACCESSION   AR058876
VERSION     AR058876.1  GI:5984453
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 20)
  AUTHORS   Gryaznov,S.M., Schultz,R.G. and Chen,J.-k.
  TITLE     Oligonucleotide N3'-P5' phosphoramidates: hybridization and
            nuclease resistance properties
  JOURNAL   Patent: US 5837835-A 8 17-NOV-1998;
FEATURES             Location/Qualifiers
     source          1. .20
                     /organism="unknown"
                     /mol_type="unassigned DNA"

  Query Match             0.4%;  Score 15.8;  DB 1;  Length 20;
  Best Local Similarity   89.5%;  Pred. No. 97;
  Matches   17;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       3303 TATTTTTATTTTTATATAT 3321
              ||| | ||||||||||||||
Db          1 TATATATATTTTTATATAT 19


RESULT 83
AR079581
LOCUS       AR079581                 20 bp    DNA     linear   PAT 31-AUG-2000
DEFINITION  Sequence 8 from patent US 5965720.
ACCESSION   AR079581
VERSION     AR079581.1  GI:10006325
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 20)
  AUTHORS   Gryaznov,S.M., Schultz,R.G. and Chen,J.-k.
  TITLE     Oligonucleotide N3'.fwdarw.P5' phosphoramidates
  JOURNAL   Patent: US 5965720-A 8 12-OCT-1999;
FEATURES             Location/Qualifiers
     source          1. .20
                     /organism="unknown"
                     /mol_type="unassigned DNA"

  Query Match             0.4%;  Score 15.8;  DB 1;  Length 20;
  Best Local Similarity   89.5%;  Pred. No. 97;
  Matches   17;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       3303 TATTTTTATTTTTATATAT 3321
              ||| | ||||||||||||||
Db          1 TATATATATTTTTATATAT 19


RESULT 84
AR099520/c
LOCUS       AR099520                 20 bp    DNA     linear   PAT 14-FEB-2001
DEFINITION  Sequence 47 from patent US 6077833.
ACCESSION   AR099520
VERSION     AR099520.1  GI:12809286
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 20)
  AUTHORS   Bennett,C.Frank. and Vickers,T.A.
  TITLE     Oligonucleotide compositions and methods for the modulation of the
            expression of B7 protein
  JOURNAL   Patent: US 6077833-A 47 20-JUN-2000;
FEATURES             Location/Qualifiers
     source          1. .20
                     /organism="unknown"
                     /mol_type="unassigned DNA"

  Query Match             0.4%;  Score 15.8;  DB 1;  Length 20;
  Best Local Similarity   89.5%;  Pred. No. 97;
  Matches   17;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       3766 TGGCTGGGATCCCTCCCCT 3784
              ||||||| ||||||| |||
Db         20 TGGCTGGCATCCCTCTCCT 2


RESULT 85
AR123290
LOCUS       AR123290                 20 bp    DNA     linear   PAT 16-MAY-2001
DEFINITION  Sequence 8 from patent US 6169170.
ACCESSION   AR123290
VERSION     AR123290.1  GI:14108256
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 20)
  AUTHORS   Gryaznov,S.M., Schultz,R.G. and Chen,J.-k.
  TITLE     Oligonucleotide N3'.fwdarw.N5'Phosphoramidate Duplexes
  JOURNAL   Patent: US 6169170-A 8 02-JAN-2001;
FEATURES             Location/Qualifiers
     source          1. .20
                     /organism="unknown"
                     /mol_type="unassigned DNA"

  Query Match             0.4%;  Score 15.8;  DB 1;  Length 20;
  Best Local Similarity   89.5%;  Pred. No. 97;
  Matches   17;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       3303 TATTTTTATTTTTATATAT 3321
              ||| | ||||||||||||||
Db          1 TATATATATTTTTATATAT 19
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RESULT 86
AR129530/c
LOCUS       AR129530                  20 bp    DNA     linear   PAT 16-MAY-2001
DEFINITION  Sequence 119 from patent US 6187533.
ACCESSION   AR129530
VERSION     AR129530.1  GI:14117427
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 20)
  AUTHORS   Bell,G.I., Yamagata,K., Oda,N., Kaisaki,P.J., Furuta,H.,
            Horikawa,Y. and Menzel,S.
  TITLE     Mutations in the diabetes susceptibility genes hepatocyte nuclear
            factor (HNF) 1 alpha (.alpha.), HNF1.beta. and HNF4.alpha
  JOURNAL   Patent: US 6187533-A 119 13-FEB-2001;
FEATURES             Location/Qualifiers
     source          1. .20
                     /organism="unknown"
                     /mol_type="unassigned DNA"

  Query Match             0.4%;  Score 15.8;  DB 1;  Length 20;
  Best Local Similarity   89.5%;  Pred. No. 97;
  Matches   17;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       3068 TGACTGAACTGGGTGTTCA 3086
              ||||||||||||| || ||
Db         20 TGACTGAACTGGGAGTCCA 2


RESULT 87
AR150304
LOCUS       AR150304                  20 bp    DNA     linear   PAT 08-AUG-2001
DEFINITION  Sequence 380 from patent US 6228642.
ACCESSION   AR150304
VERSION     AR150304.1  GI:15114895
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 20)
  AUTHORS   Baker,B.F., Bennett,C.Frank., Butler,M.M. and Shanahan,W.R. Jr.
  TITLE     Antisense oligonucleotide modulation of tumor necrosis
            factor-(.alpha.) (TNF-.alpha.) expression
  JOURNAL   Patent: US 6228642-A 380 08-MAY-2001;
FEATURES             Location/Qualifiers
     source          1. .20
                     /organism="unknown"
                     /mol_type="unassigned DNA"

  Query Match             0.4%;  Score 15.8;  DB 1;  Length 20;
  Best Local Similarity   89.5%;  Pred. No. 97;
  Matches   17;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       3414 TTTCAAGGAAGTATGGAAA 3432
              | ||||||||||| ||||||
Db          1 TCTCAAGGAAGTCTGGAAA 19


RESULT 88
AR178801/c
LOCUS       AR178801                  20 bp    DNA     linear   PAT 20-APR-2002
DEFINITION  Sequence 47 from patent US 6319906.
ACCESSION   AR178801
VERSION     AR178801.1  GI:20219939
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 20)
  AUTHORS   Bennett,C.Frank. and Vickers,T.A.
  TITLE     Oligonucleotide compositions and methods for the modulation of the
            expression of B7 protein
  JOURNAL   Patent: US 6319906-A 47 20-NOV-2001;
FEATURES             Location/Qualifiers
     source          1. .20
                     /organism="unknown"
                     /mol_type="unassigned DNA"

  Query Match             0.4%;  Score 15.8;  DB 1;  Length 20;
  Best Local Similarity   89.5%;  Pred. No. 97;
  Matches   17;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       3766 TGGCTGGGATCCCTCCCCT 3784
              ||||||| ||||||| |||
Db         20 TGGCTGGCATCCCTCTCCT 2


RESULT 89
BD138261/c
LOCUS       BD138261                  20 bp    DNA     linear   PAT 18-SEP-2002
DEFINITION  Antisense modulation of human MDM2 expression.
ACCESSION   BD138261
VERSION     BD138261.1  GI:23233206
KEYWORDS    JP 2002508944-A/187.
SOURCE      unidentified
  ORGANISM  unidentified
            unclassified.
REFERENCE   1  (bases 1 to 20)
  AUTHORS   Miraglia,L.J., Nero,P., Graham,M.J., Monia,B.P. and Cowsert,L.M.
  TITLE     Antisense modulation of human MDM2 expression
  JOURNAL   Patent: JP 2002508944-A 187 26-MAR-2002;
            ISIS PHARMACEUTICALS INC
COMMENT     OS   Unidentified
            PN   JP 2002508944-A/187
            PD   26-MAR-2002
            PF   26-MAR-1999 JP 2000538025
            PR   26-MAR-1998 US    09/048810
            PI   LOREN J MIRAGLIA,PAMELA NERO,MARK J GRAHAM,BRETT P MONIA,LEX M

            PI   COWSERT
            PC   C12N15/09,A61K48/00,A61P9/10,A61P17/06,A61P35/00,C07H21/04//
            PC   C12Q1/68,
            PC   C12N15/00
            CC   Strandedness: Single;
            CC   Topology: Linear;
            CC   Antisense modulation of human MDM2 expression FH   Key
                Location/Qualifiers
            FT   source          1. .20
            FT                   /organism='Unidentified'.
FEATURES             Location/Qualifiers
     source          1. .20
                     /organism="unidentified"
                     /mol_type="genomic DNA"
                     /db_xref="taxon:32644"

  Query Match             0.4%;  Score 15.8;  DB 1;  Length 20;
  Best Local Similarity   89.5%;  Pred. No. 97;
  Matches   17;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       2916 AAGGAACCCATGACAAAGA 2934
              ||| |||||| ||||||||
Db         19 AAGAAACCCAAGACAAAGA 1


RESULT 90
BD188892
LOCUS       BD188892                  20 bp    DNA     linear   PAT 17-JUL-2003
DEFINITION  Oligonucleotide N3' to P5' phosphoramidate: synthesis and compound;
            hybridization and nuclease tolerant characteristics.
ACCESSION   BD188892
VERSION     BD188892.1  GI:32998631
KEYWORDS    JP 2003012688-A/8.
SOURCE      unidentified
```

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  ORGANISM  unidentified
            unclassified.
REFERENCE   1  (bases 1 to 20)
  AUTHORS   Gryaznov,S.M., Schultz,R.G. and Chen,J.
  TITLE     Oligonucleotide N3' to P5' phosphoramidate: synthesis and compound
            hybridization and nuclease tolerant characteristics
  JOURNAL   Patent: JP 2003012688-A 8 15-JAN-2003;
            LYNX THERAPEUTICS INC
COMMENT     OS   Unidentified
            PN   JP 2003012688-A/8
            PD   15-JAN-2003
            PF   12-JUN-2002 JP 2002171743
            PR   18-MAR-1994 US    08/210505,18-MAR-1994 US    08/214599 PI
            SERGEI M GRYAZNOV,RONALD G SCHULTZ,JER-KANG CHEN PC
            C07H19/16//C12Q1/02,C12Q1/68
            CC   Strandedness: Both;
            CC   Topology: Linear;
            CC   /note= 'where the intersubunit bond is 'np''
            CC   /note= 'where the intersubunit bond is 'np''
            CC   /note= 'where the intersubunit bond is 'np''
            CC   /note= 'where the intersubunit bond is 'np''
            FH   Key             Location/Qualifiers
            FT   misc_feature    1. .2
            FT   misc_feature    3. .4
            FT   misc_feature    5. .6
            FT   misc_feature    7. .8.
FEATURES                Location/Qualifiers
     source             1. .20
                        /organism="unidentified"
                        /mol_type="genomic DNA"
                        /db_xref="taxon:32644"

  Query Match              0.4%;  Score 15.8;  DB 1;  Length 20;
  Best Local Similarity   89.5%;  Pred. No. 97;
  Matches   17;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       3303 TATTTTTATTTTTATATAT 3321
              ||| | ||||||||||||||
Db          1 TATATATATTTTTATATAT 19


RESULT 91
BD228177
LOCUS       BD228177                  20 bp    DNA     linear   PAT 17-JUL-2003
DEFINITION  Antisense oligonucleotide regulation of expression of tumor
            necrosis factor-alpha (TNF-alpha).
ACCESSION   BD228177
VERSION     BD228177.1  GI:33037947
KEYWORDS    JP 2002526125-A/380.
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            other sequences; artificial sequences.
REFERENCE   1  (bases 1 to 20)
  AUTHORS   Baker,B.F., Bennett,F.C., Butler,M.M. and Jr,W.J.S.
  TITLE     Antisense oligonucleotide regulation of expression of tumor
            necrosis factor-alpha (TNF-alpha)
  JOURNAL   Patent: JP 2002526125-A 380 20-AUG-2002;
            ISIS PHARMACEUTICALS INC
COMMENT     OS   Artificial Sequence
            PN   JP 2002526125-A/380
            PD   20-AUG-2002
            PF   05-OCT-1999 JP 2000574737
            PR   05-OCT-1998 US    09/166186,18-MAY-1999 US    09/313932 PI
            BRENDA F BAKER,FRANK C BENNETT,MADELINE M BUTLER,WILLIAM J  PI
            SHANAHAN JR
            PC   C12N15/09,A61K31/7115,A61K31/712,A61K31/7125,A61K48/00,A61P1/
            PC   00,A61P1/16,
            PC   A61P1/18,A61P3/10,A61P17/00,A61P17/04,A61P29/00,A61P31/00, PC
             C07H21/02,
            PC   C07H21/04,C12N15/00
            CC   Synthetic
            FH   Key             Location/Qualifiers
            FT   source          1. .20
            FT                   /organism='Artificial Sequence'.
FEATURES                Location/Qualifiers
     source             1. .20
                        /organism="synthetic construct"
                        /mol_type="genomic DNA"
                        /db_xref="taxon:32630"

  Query Match              0.4%;  Score 15.8;  DB 1;  Length 20;
  Best Local Similarity   89.5%;  Pred. No. 97;
  Matches   17;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       3414 TTTCAAGGAAGTATGGAAA 3432
              | ||||||||||| ||||||
Db          1 TCTCAAGGAAGTCTGGAAA 19


RESULT 92
CQ786110/c
LOCUS       CQ786110                  20 bp    DNA     linear   PAT 24-MAR-2004
DEFINITION  Sequence 34 from Patent WO2004018711.
ACCESSION   CQ786110
VERSION     CQ786110.1  GI:45721213
KEYWORDS    .
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            other sequences; artificial sequences.
REFERENCE   1
  AUTHORS   Ming-Qing,D.
  TITLE     Diagnostic test
  JOURNAL   Patent: WO 2004018711-A 34 04-MAR-2004;
            University College London (GB)
FEATURES                Location/Qualifiers
     source             1. .20
                        /organism="synthetic construct"
                        /mol_type="unassigned DNA"
                        /db_xref="taxon:32630"
                        /note="primer for identification of HPV 45"

  Query Match              0.4%;  Score 15.8;  DB 1;  Length 20;
  Best Local Similarity   89.5%;  Pred. No. 97;
  Matches   17;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1995 ACACCTTCAGATAAGCAGG 2013
              |||||| |||| |||||||
Db         20 ACACCTCCAGAAAAGCAGG 2


RESULT 93
I33253
LOCUS       I33253                    20 bp    DNA     linear   PAT 06-FEB-1997
DEFINITION  Sequence 8 from patent US 5591607.
ACCESSION   I33253
VERSION     I33253.1  GI:1824044
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 20)
  AUTHORS   Gryaznov,S.M., Schultz,R.G. and Chen,J.-k.
  TITLE     Oligonucleotide N3.fwdarw.P5' phosphoramidates: triplex DNA
            formation
  JOURNAL   Patent: US 5591607-A 8 07-JAN-1997;
FEATURES                Location/Qualifiers
     source             1. .20
                        /organism="unknown"
                        /mol_type="unassigned DNA"

  Query Match              0.4%;  Score 15.8;  DB 1;  Length 20;
  Best Local Similarity   89.5%;  Pred. No. 97;
  Matches   17;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       3303 TATTTTTATTTTTATATAT 3321
              ||| | ||||||||||||||
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Db          1 TATATATATTTTTATATAT 19


RESULT 94
I35518
LOCUS       I35518                  20 bp    DNA     linear   PAT 13-MAY-1997
DEFINITION  Sequence 8 from patent US 5599922.
ACCESSION   I35518
VERSION     I35518.1  GI:2088486
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 20)
  AUTHORS   Gryaznov,S.M., Schultz,R.G. and Chen,J.-k.
  TITLE     Oligonucleotide N3'-P5' phosphoramidates: hybridization and
            nuclease resistance properties
  JOURNAL   Patent: US 5599922-A 8 04-FEB-1997;
FEATURES             Location/Qualifiers
     source          1. .20
                     /organism="unknown"
                     /mol_type="unassigned DNA"

  Query Match             0.4%;  Score 15.8;  DB 1;  Length 20;
  Best Local Similarity   89.5%;  Pred. No. 97;
  Matches   17;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       3303 TATTTTTATTTTTATATAT 3321
              ||| | ||||||||||||||
Db          1 TATATATATTTTTATATAT 19


RESULT 95
I43128
LOCUS       I43128                  20 bp    DNA     linear   PAT 07-OCT-1997
DEFINITION  Sequence 8 from patent US 5631135.
ACCESSION   I43128
VERSION     I43128.1  GI:2468372
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 20)
  AUTHORS   Gryaznov,S.M., Schultz,R.G. and Chen,J.-K.
  TITLE     Oligonucleotide N3'.fwdarw.P5' phosphoramidates: hybridization and
            nuclease resistance properties
  JOURNAL   Patent: US 5631135-A 8 20-MAY-1997;
FEATURES             Location/Qualifiers
     source          1. .20
                     /organism="unknown"
                     /mol_type="unassigned DNA"

  Query Match             0.4%;  Score 15.8;  DB 1;  Length 20;
  Best Local Similarity   89.5%;  Pred. No. 97;
  Matches   17;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       3303 TATTTTTATTTTTATATAT 3321
              ||| | ||||||||||||||
Db          1 TATATATATTTTTATATAT 19


RESULT 96
I92006
LOCUS       I92006                  20 bp    DNA     linear   PAT 01-DEC-1998
DEFINITION  Sequence 8 from patent US 5726297.
ACCESSION   I92006
VERSION     I92006.1  GI:3936476
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 20)
  AUTHORS   Gryaznov,S.M., Schultz,R.G. and Chen,J.-K.
  TITLE     Oligodeoxyribonucleotide N3' P5' phosphoramidates
  JOURNAL   Patent: US 5726297-A 8 10-MAR-1998;
FEATURES             Location/Qualifiers
     source          1. .20
                     /organism="unknown"
                     /mol_type="unassigned DNA"

  Query Match             0.4%;  Score 15.8;  DB 1;  Length 20;
  Best Local Similarity   89.5%;  Pred. No. 97;
  Matches   17;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       3303 TATTTTTATTTTTATATAT 3321
              ||| | ||||||||||||||
Db          1 TATATATATTTTTATATAT 19


RESULT 97
AR432353/c
LOCUS       AR432353                20 bp    DNA     linear   PAT 18-DEC-2003
DEFINITION  Sequence 153 from patent US 6653133.
ACCESSION   AR432353
VERSION     AR432353.1  GI:40194626
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 20)
  AUTHORS   Dean,N.M., Marcusson,E.G. and Wyatt,J.
  TITLE     Antisense modulation of Fas mediated signaling
  JOURNAL   Patent: US 6653133-A 153 25-NOV-2003;
FEATURES             Location/Qualifiers
     source          1. .20
                     /organism="unknown"
                     /mol_type="genomic DNA"

  Query Match             0.4%;  Score 15.8;  DB 1;  Length 20;
  Best Local Similarity   89.5%;  Pred. No. 97;
  Matches   17;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        861 TTAAGAAATAATTTTGATA 879
              |||||||||||| || |||
Db         20 TTAAGAAATAATATTTATA 2


RESULT 98
AX004440
LOCUS       AX004440                20 bp    DNA     linear   PAT 24-AUG-2000
DEFINITION  Sequence 22 from Patent WO9916899.
ACCESSION   AX004440
VERSION     AX004440.1  GI:9927899
KEYWORDS    .
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            other sequences; artificial sequences.
REFERENCE   1
  AUTHORS   Anctil,J.L. and Cote,G.
  TITLE     Molecular diagnostic of glaucomas associated with chromosomes 2 and
            6
  JOURNAL   Patent: WO 9916899-A 22 08-APR-1999;
            ANCTIL JEAN LOUIS (CA); COTE GILLES (CA)
FEATURES             Location/Qualifiers
     source          1. .20
                     /organism="synthetic construct"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:32630"
                     /note="OLIGONUCLEOTIDE"

  Query Match             0.4%;  Score 15.8;  DB 1;  Length 20;
  Best Local Similarity   89.5%;  Pred. No. 97;
  Matches   17;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       3735 GGACCTATGAATCTATTTA 3753
              ||| || ||||||||||||
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```
Db          1 GGAACTGTGAATCTATTTA 19


RESULT 99
AX665199/c
LOCUS       AX665199                  20 bp    DNA     linear   PAT 26-MAR-2003
DEFINITION  Sequence 36 from Patent EP1275716.
ACCESSION   AX665199
VERSION     AX665199.1  GI:29290323
KEYWORDS    .
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            other sequences; artificial sequences.
REFERENCE   1
  AUTHORS   Okuda,T., Saito,S., Dorsey,K.M. and Tsuzaki,Y.
  TITLE     Modified dna molecule, recombinant containing the same thing, and
            uses thereof
  JOURNAL   Patent: EP 1275716-A 36 15-JAN-2003;
            Zeon Corporation (JP)
FEATURES             Location/Qualifiers
     source          1. .20
                     /organism="synthetic construct"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:32630"
                     /note="primer M11-7"

  Query Match             0.4%;  Score 15.8;  DB 1;  Length 20;
  Best Local Similarity   89.5%;  Pred. No. 97;
  Matches   17;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       3702 TGTTTATTTTTTCAGAAC 3720
              ||||||||  | ||||||||
Db         19 TGTTTATTCTCTTCAGAAC 1


RESULT 100
BD012503
LOCUS       BD012503                  20 bp    DNA     linear   PAT 02-AUG-2002
DEFINITION  Guanosine triphosphate-binding protein-coupled receptors, genes
            thereof and production and use of the same.
ACCESSION   BD012503
VERSION     BD012503.1  GI:22092692
KEYWORDS    WO 0109323-A/20.
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1  (bases 1 to 20)
  AUTHORS   Ota,T., Isogai,T., Nishikawa,T., Hayashi,K., Saito,K., Yamamoto,J.,
            Ishii,S., Sugiyama,T., Wakamatsu,A., Nagai,K., Otsuki,T.,
            Kishimoto,T., Yano,K., Kanzaki,K. and Inoue,Y.
  TITLE     Guanosine triphosphate-binding protein-coupled receptors, genes
            thereof and production and use of the same
  JOURNAL   Patent: WO 0109323-A 20 08-FEB-2001;
            HELIX RESEARCH INSTITUTE,TOSHIO OTA,TAKAO ISOGAI,TETSUO NISHIKAWA,
            KOJI HAYASHI,KAORU SAITO,JUNICHI YAMAMOTO,SHIZUKO ISHII, OMOYASU
            SUGIYAMA, AI WAKAMATSU,KEIICHI NAGAI,TETSUJI OTSUKI,TOSHIMITSU
            KISHIMOTO, KAZUHIRO YANO,KOJI KANZAKI,YOSHIHISA INOUE
COMMENT     PN   WO 0109323-A/20
            PD   08-FEB-2001
            PF   28-JUL-2000 WO 2000JP005070
            PR   29-JUL-1999 JP 99P   248036,27-AUG-1999 JP 99P   300253 PR
            11-JAN-2000 JP 00P   118776,02-MAY-2000 JP 00P   183767 PR
            18-OCT-1999 US    60/159590,17-FEB-2000 US    60/183322 PI   TOSHIO
            OTA,TAKAO ISOGAI,TETSUO NISHIKAWA,KOJI HAYASHI, PI   KAORU SAITO,
            PI   JUNICHI YAMAMOTO,SHIZUKO ISHII,TOMOYASU SUGIYAMA,AI WAKAMATSU,
            PI   KEIICHI NAGAI,TETSUJI OTSUKI,TOSHIMITSU KISHIMOTO, PI
            KAZUHIRO YANO,
            PI   KOJI KANZAKI,YOSHIHISA INOUE
            PC   C12N15/12,C12N15/63,C12P21/02,C07K14/705,C07K16/28,A61K45/00,
            PC   A61P35/00,
            PC   A61P25/28,G01N33/566,G01N33/50,G01N33/15
            CC   Description of Artificial Sequence: an artificially
            synthesized primer
            CC
            CC   sequence
            FH   Key              Location/Qualifiers.
FEATURES             Location/Qualifiers
     source          1. .20
                     /organism="Homo sapiens"
                     /mol_type="genomic DNA"
                     /db_xref="taxon:9606"

  Query Match             0.4%;  Score 15.8;  DB 1;  Length 20;
  Best Local Similarity   89.5%;  Pred. No. 97;
  Matches   17;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        516 GCCCTGGGAGCCTTTTCTG 534
              ||||||| |||||| ||||
Db          1 GCCCTGGTAGCCTTCTCTG 19


RESULT 101
BD136927/c
LOCUS       BD136927                  21 bp    DNA     linear   PAT 18-SEP-2002
DEFINITION  Oligonucleotide for amplification and detection of Epstein-Bar
            virus (EBV) nucleic acid.
ACCESSION   BD136927
VERSION     BD136927.1  GI:23231872
KEYWORDS    JP 2002505122-A/25.
SOURCE      Human herpesvirus 4 (Epstein-Barr virus)
  ORGANISM  Human herpesvirus 4
            Viruses; dsDNA viruses, no RNA stage; Herpesviridae;
            Gammaherpesvirinae; Lymphocryptovirus.
REFERENCE   1  (bases 1 to 21)
  AUTHORS   Vervoort,M.B.H.J., Den,A.J.C.V. and Middeldorp,J.M.
  TITLE     Oligonucleotide for amplification and detection of Epstein-Bar
            virus (EBV) nucleic acid
  JOURNAL   Patent: JP 2002505122-A 25 19-FEB-2002;
            AKZO NOBEL NV
COMMENT     OS   Epstein-barr virus
            PN   JP 2002505122-A/25
            PD   19-FEB-2002
            PF   01-MAR-1999 JP 2000534686
            PR   04-MAR-1998 EP   98200655.3,14-DEC-1998 EP   98204231.9 PI
            MARCEL BARTOLINA HENDRIKUS JOHANNES VERVOORT, PI   ADRIANUS
            JOHANNES CHRISTIAAN VAN DEN BRULE,JAAP MICHIEL  PI   MIDDELDORP
            PC   C12N15/09,C12Q1/68,C12Q1/70,C12N15/00
            CC   Strandedness: Single;
            CC   Topology: Linear;
            CC   Oligonucleotide for amplification and detection of Epstein-Bar

            CC            virus (EBV)
            CC   nucleic acid
            FH   Key              Location/Qualifiers
            FT   source           1. .21
            FT                    /organism='Epstein-barr virus'.
FEATURES             Location/Qualifiers
     source          1. .21
                     /organism="Human herpesvirus 4"
                     /mol_type="genomic DNA"
                     /db_xref="taxon:10376"

  Query Match             0.4%;  Score 15.8;  DB 1;  Length 21;
  Best Local Similarity   89.5%;  Pred. No. 1e+02;
  Matches   17;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       2319 GCTGCCAACATCATCCATG 2337
              |||||||||||  |||||
Db         21 GCTGCCAACATCTCCCATG 3


RESULT 102
AX018466/c
LOCUS       AX018466                  21 bp    DNA     linear   PAT 07-SEP-2000
DEFINITION  Sequence 25 from Patent WO9945155.
```

```
ACCESSION   AX018466
VERSION     AX018466.1  GI:10042617
KEYWORDS    .
SOURCE      Human herpesvirus 4 (Epstein-Barr virus)
  ORGANISM  Human herpesvirus 4
            Viruses; dsDNA viruses, no RNA stage; Herpesviridae;
            Gammaherpesvirinae; Lymphocryptovirus.
REFERENCE   1
  AUTHORS   Middeldorp,J.M., Van Den Brule,A.J. and Vervoort,M.B.
  TITLE     Oligonucleotides for the amplification and detection of epstein
            barr virus (ebv) nucleic acid
  JOURNAL   Patent: WO 9945155-A 25 10-SEP-1999;
            MIDDELDORP JAAP MICHIEL (NL); AKZO NOBEL NV (NL); DEN BRULE
            ADRIANUS JOHANNES CH (NL); VERVOORT MARCEL BARTOLINA HEND (NL)
FEATURES              Location/Qualifiers
     source           1. .21
                      /organism="Human herpesvirus 4"
                      /mol_type="unassigned DNA"
                      /db_xref="taxon:10376"

  Query Match              0.4%;  Score 15.8;  DB 1;  Length 21;
  Best Local Similarity   89.5%;  Pred. No. 1e+02;
  Matches   17;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       2319 GCTGCCAACATCATCCATG 2337
              ||||||||||||  |||||
Db         21 GCTGCCAACATCTCCCATG 3


RESULT 103
AX921483/c
LOCUS       AX921483                  21 bp    DNA     linear   PAT 18-DEC-2003
DEFINITION  Sequence 476 from Patent WO02068652.
ACCESSION   AX921483
VERSION     AX921483.1  GI:40215104
KEYWORDS    .
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            other sequences; artificial sequences.
REFERENCE   1
  AUTHORS   .
  TITLE     Nov-x proteins and nucleic acids encoding same
  JOURNAL   Patent: WO 02068652-A 476 06-SEP-2002;
FEATURES              Location/Qualifiers
     source           1. .21
                      /organism="synthetic construct"
                      /mol_type="unassigned DNA"
                      /db_xref="taxon:32630"
                      /note="Description of Artificial Sequence: oligonucleotide
                      primer"

  Query Match              0.4%;  Score 15.8;  DB 1;  Length 21;
  Best Local Similarity   89.5%;  Pred. No. 1e+02;
  Matches   17;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       2626 GGAATCCAGAAGGAACAGT 2644
              ||||  ||| ||||||||||
Db         21 GGAAACCACAAGGAACAGT 3


RESULT 104
AR046255
LOCUS       AR046255                  17 bp    DNA     linear   PAT 29-SEP-1999
DEFINITION  Sequence 1048 from patent US 5817796.
ACCESSION   AR046255
VERSION     AR046255.1  GI:5967720
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 17)
  AUTHORS   Stinchcomb,D.T., Draper,K., McSwiggen,J. and Jarvis,T.
  TITLE     C-myb ribozymes having 2'-5'-linked adenylate residues
  JOURNAL   Patent: US 5817796-A 1048 06-OCT-1998;
FEATURES              Location/Qualifiers
     source           1. .17
                      /organism="unknown"
                      /mol_type="unassigned DNA"

  Query Match              0.4%;  Score 15.4;  DB 1;  Length 17;
  Best Local Similarity   94.1%;  Pred. No. 82;
  Matches   16;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       3305 TTTTTATTTTTATATAT 3321
              ||||||  ||||||||||
Db          1 TTTTTAATTTTATATAT 17


RESULT 105
I53307
LOCUS       I53307                    17 bp    DNA     linear   PAT 07-OCT-1997
DEFINITION  Sequence 1048 from patent US 5646042.
ACCESSION   I53307
VERSION     I53307.1  GI:2474510
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 17)
  AUTHORS   Stinchcomb,D.T., Draper,K., McSwiggen,J. and Jarvis,T.
  TITLE     C-myb targeted ribozymes
  JOURNAL   Patent: US 5646042-A 1048 08-JUL-1997;
FEATURES              Location/Qualifiers
     source           1. .17
                      /organism="unknown"
                      /mol_type="unassigned DNA"

  Query Match              0.4%;  Score 15.4;  DB 1;  Length 17;
  Best Local Similarity   94.1%;  Pred. No. 82;
  Matches   16;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       3305 TTTTTATTTTTATATAT 3321
              ||||||  ||||||||||
Db          1 TTTTTAATTTTATATAT 17


RESULT 106
AX729602/c
LOCUS       AX729602                  17 bp    DNA     linear   PAT 08-MAY-2003
DEFINITION  Sequence 1236 from Patent WO03025175.
ACCESSION   AX729602
VERSION     AX729602.1  GI:30508945
KEYWORDS    .
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1
  AUTHORS   Telerman,A., Amson,R. and Tuijnder,M.
  TITLE     Sequences involved in phenomena of tumour suppression, tumour
            reversion, apoptosis and/or virus resistance and their use as
            medicines
  JOURNAL   Patent: WO 03025175-A 1236 27-MAR-2003;
            Molecular Engines Laboratories (FR)
FEATURES              Location/Qualifiers
     source           1. .17
                      /organism="Homo sapiens"
                      /mol_type="unassigned DNA"
                      /db_xref="taxon:9606"

  Query Match              0.4%;  Score 15.4;  DB 1;  Length 17;
  Best Local Similarity   94.1%;  Pred. No. 82;
  Matches   16;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       2411 TGAATATGAGATTGCTC 2427
              ||||||||||||||| ||
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```
Db         17 TGAATATGAGATTGATC 1


RESULT 107
AR042291/c
LOCUS       AR042291                  18 bp    DNA     linear   PAT 29-SEP-1999
DEFINITION  Sequence 1081 from patent US 5811300.
ACCESSION   AR042291
VERSION     AR042291.1  GI:5962787
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 18)
  AUTHORS   Sullivan,S., Draper,K., Kisich,K., Stinchcomb,D.T. and McSwiggen,J.
  TITLE     TNF-.alpha. ribozymes
  JOURNAL   Patent: US 5811300-A 1081 22-SEP-1998;
FEATURES             Location/Qualifiers
     source          1. .18
                     /organism="unknown"
                     /mol_type="unassigned DNA"

  Query Match             0.4%;  Score 15.4;  DB 1;  Length 18;
  Best Local Similarity   94.1%;  Pred. No. 89;
  Matches   16;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       3416 TCAAGGAAGTATGGAAA 3432
              ||||||||||  ||||||
Db         18 TCAAGGAAGTCTGGAAA 2


RESULT 108
AR083517/c
LOCUS       AR083517                  18 bp    DNA     linear   PAT 01-SEP-2000
DEFINITION  Sequence 56 from patent US 5976873.
ACCESSION   AR083517
VERSION     AR083517.1  GI:10010290
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 18)
  AUTHORS   Bohinski,R.J. and Whitsett,J.A.
  TITLE     Nucleic acid sequences controlling lung cell-specific gene
            expression
  JOURNAL   Patent: US 5976873-A 56 02-NOV-1999;
FEATURES             Location/Qualifiers
     source          1. .18
                     /organism="unknown"
                     /mol_type="unassigned DNA"

  Query Match             0.4%;  Score 15.4;  DB 1;  Length 18;
  Best Local Similarity   94.1%;  Pred. No. 89;
  Matches   16;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1798 CCCTCCAGGTTCTTGAT 1814
              ||||||||||  ||||||
Db         17 CCCTCCAGGTGCTTGAT 1


RESULT 109
AR083519
LOCUS       AR083519                  18 bp    DNA     linear   PAT 01-SEP-2000
DEFINITION  Sequence 58 from patent US 5976873.
ACCESSION   AR083519
VERSION     AR083519.1  GI:10010292
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 18)
  AUTHORS   Bohinski,R.J. and Whitsett,J.A.
  TITLE     Nucleic acid sequences controlling lung cell-specific gene
            expression
  JOURNAL   Patent: US 5976873-A 58 02-NOV-1999;
FEATURES             Location/Qualifiers
     source          1. .18
                     /organism="unknown"
                     /mol_type="unassigned DNA"

  Query Match             0.4%;  Score 15.4;  DB 1;  Length 18;
  Best Local Similarity   94.1%;  Pred. No. 89;
  Matches   16;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1798 CCCTCCAGGTTCTTGAT 1814
              ||||||||||  ||||||
Db         2 CCCTCCAGGTGCTTGAT 18


RESULT 110
AX637740/c
LOCUS       AX637740                  18 bp    RNA     linear   PAT 21-FEB-2003
DEFINITION  Sequence 4879 from Patent EP1260586.
ACCESSION   AX637740
VERSION     AX637740.1  GI:28473354
KEYWORDS    .
SOURCE      unidentified
  ORGANISM  unidentified
            unclassified.
REFERENCE   1
  AUTHORS   Stinchcomb,D.T., Dudycz,L.W., Chowrira,B., Grimm,S., Direnzo,A.,
            Karpeisky,A., Draper,K.G., Kisich,K., Matulic-Adamic,J.,
            Mcswiggen,J.A., Modak,A., Pavco,P., Beigelman,L., Sullivan,S.M.,
            Sweedler,D., Thompson,J.D., Tracz,D., Usman,N., Wincott,F.E. and
            Woolf,T.
  TITLE     Method and reagent for inhibiting the expression of disease related
            genes
  JOURNAL   Patent: EP 1260586-A 4879 27-NOV-2002;
            RIBOZYME PHARMACEUTICALS, INC. (US)
FEATURES             Location/Qualifiers
     source          1. .18
                     /organism="unidentified"
                     /mol_type="unassigned RNA"
                     /db_xref="taxon:32644"

  Query Match             0.4%;  Score 15.4;  DB 1;  Length 18;
  Best Local Similarity   94.1%;  Pred. No. 89;
  Matches   16;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       3416 TCAAGGAAGTATGGAAA 3432
              ||||||||||  ||||||
Db         18 TCAAGGAAGTCTGGAAA 2


RESULT 111
CQ788034/c
LOCUS       CQ788034                  19 bp    DNA     linear   PAT 24-MAR-2004
DEFINITION  Sequence 340 from Patent WO2004020664.
ACCESSION   CQ788034
VERSION     CQ788034.1  GI:45722987
KEYWORDS    .
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1
  AUTHORS   Geldermann,H., Preuss,S. and Han,Y.
  TITLE     Polymorphous microsatellite loci in genes for pre-diagnostic
            purposes
  JOURNAL   Patent: WO 2004020664-A 340 11-MAR-2004;
            Universitaet Hohenheim (DE)
FEATURES             Location/Qualifiers
     source          1. .19
                     /organism="Homo sapiens"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:9606"
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     satellite       1. .19
                     /note="M09, Allel R (PrP-Gen)"
     repeat_unit     1. .4
                     /note="Anzahl der Wiederholungen: 4"
     repeat_unit     9. .12
                     /note="Anzahl der Wiederholungen: 5"
     repeat_unit     13. .15
                     /note="Anzahl der Wiederholungen: 1"
     repeat_unit     16. .19
                     /note="Anzahl der Wiederholungen: 1"

  Query Match              0.4%;  Score 15.4;  DB 1;  Length 19;
  Best Local Similarity   94.1%;  Pred. No. 97;
  Matches   16;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1061 TATTATTGACTTATTTA 1077
              ||||||| |||||||||
Db         17 TATTATTTACTTATTTA 1


RESULT 112
AR100497
LOCUS       AR100497                  20 bp    DNA     linear   PAT 14-FEB-2001
DEFINITION  Sequence 228 from patent US 6080580.
ACCESSION   AR100497
VERSION     AR100497.1  GI:12810945
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 20)
  AUTHORS   Baker,B.F., Bennett,C.Frank., Butler,M.M. and Shanahan,W.R. Jr.
  TITLE     Antisense oligonucleotide modulation of tumor necrosis
            factor-.alpha. (TNF-.alpha.) expression
  JOURNAL   Patent: US 6080580-A 228 27-JUN-2000;
FEATURES             Location/Qualifiers
     source          1. .20
                     /organism="unknown"
                     /mol_type="unassigned DNA"

  Query Match              0.4%;  Score 15.4;  DB 1;  Length 20;
  Best Local Similarity   94.1%;  Pred. No. 1e+02;
  Matches   16;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       3416 TCAAGGAAGTATGGAAA 3432
              |||||||||| ||||||
Db          1 TCAAGGAAGTCTGGAAA 17


RESULT 113
AR150152
LOCUS       AR150152                  20 bp    DNA     linear   PAT 08-AUG-2001
DEFINITION  Sequence 228 from patent US 6228642.
ACCESSION   AR150152
VERSION     AR150152.1  GI:15114743
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 20)
  AUTHORS   Baker,B.F., Bennett,C.Frank., Butler,M.M. and Shanahan,W.R. Jr.
  TITLE     Antisense oligonucleotide modulation of tumor necrosis
            factor-(.alpha.) (TNF-.alpha.) expression
  JOURNAL   Patent: US 6228642-A 228 08-MAY-2001;
FEATURES             Location/Qualifiers
     source          1. .20
                     /organism="unknown"
                     /mol_type="unassigned DNA"

  Query Match              0.4%;  Score 15.4;  DB 1;  Length 20;
  Best Local Similarity   94.1%;  Pred. No. 1e+02;
  Matches   16;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       3416 TCAAGGAAGTATGGAAA 3432
              |||||||||| ||||||
Db          1 TCAAGGAAGTCTGGAAA 17


RESULT 114
BD228025
LOCUS       BD228025                  20 bp    DNA     linear   PAT 17-JUL-2003
DEFINITION  Antisense oligonucleotide regulation of expression of tumor
            necrosis factor-alpha (TNF-alpha).
ACCESSION   BD228025
VERSION     BD228025.1  GI:33037795
KEYWORDS    JP 2002526125-A/228.
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            other sequences; artificial sequences.
REFERENCE   1  (bases 1 to 20)
  AUTHORS   Baker,B.F., Bennett,F.C., Butler,M.M. and Jr,W.J.S.
  TITLE     Antisense oligonucleotide regulation of expression of tumor
            necrosis factor-alpha (TNF-alpha)
  JOURNAL   Patent: JP 2002526125-A 228 20-AUG-2002;
            ISIS PHARMACEUTICALS INC
COMMENT     OS   Artificial Sequence
            PN   JP 2002526125-A/228
            PD   20-AUG-2002
            PF   05-OCT-1999 JP 2000574737
            PR   05-OCT-1998 US    09/166186,18-MAY-1999 US    09/313932 PI
            BRENDA F BAKER,FRANK C BENNETT,MADELINE M BUTLER,WILLIAM J  PI
            SHANAHAN JR
            PC   C12N15/09,A61K31/7115,A61K31/712,A61K31/7125,A61K48/00,A61P1/
            PC   00,A61P1/16,
            PC   A61P1/18,A61P3/10,A61P17/00,A61P17/04,A61P29/00,A61P31/00, PC
             C07H21/02,
            PC   C07H21/04,C12N15/00
            CC   Synthetic
            FH   Key             Location/Qualifiers
            FT   source          1. .20
            FT                   /organism='Artificial Sequence'.
FEATURES             Location/Qualifiers
     source          1. .20
                     /organism="synthetic construct"
                     /mol_type="genomic DNA"
                     /db_xref="taxon:32630"

  Query Match              0.4%;  Score 15.4;  DB 1;  Length 20;
  Best Local Similarity   94.1%;  Pred. No. 1e+02;
  Matches   16;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       3416 TCAAGGAAGTATGGAAA 3432
              |||||||||| ||||||
Db          1 TCAAGGAAGTCTGGAAA 17


RESULT 115
BD235863/c
LOCUS       BD235863                  20 bp    DNA     linear   PAT 17-JUL-2003
DEFINITION  Method of estimating bone fracture frequency by screening
            polymorphism in vitamin D receptor gene.
ACCESSION   BD235863
VERSION     BD235863.1  GI:33045633
KEYWORDS    JP 2002525074-A/4.
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            other sequences; artificial sequences.
REFERENCE   1  (bases 1 to 20)
  AUTHORS   Uitterlinden,A.G., Van,J.P.T.M., Leeuwen and Pols,H.A.P.
  TITLE     Method of estimating bone fracture frequency by screening
            polymorphism in vitamin D receptor gene
  JOURNAL   Patent: JP 2002525074-A 4 13-AUG-2002;
            ERASMUS UNIVERSITEIT ROTTERDAM
COMMENT     OS   Artificial Sequence
            PN   JP 2002525074-A/4
            PD   13-AUG-2002
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            PF   10-SEP-1999 JP 2000570366
            PR   10-SEP-1998 GB    9819769.2
            PI   ANDREAS GERARDUS UITTERLINDEN,JOHANNES PETRUS THOMAS MARIA VAN

            PI   LEEUWEN,
            PI   HUIBERT ADRIAAN PIETER POLS
            PC   C12N15/09,C12Q1/68,C12N15/00
            CC   Description of Artificial Sequence:Synthetic
            FH   Key             Location/Qualifiers
            FT   source          1. .20
            FT                   /organism='Artificial Sequence'.
FEATURES             Location/Qualifiers
     source          1. .20
                     /organism="synthetic construct"
                     /mol_type="genomic DNA"
                     /db_xref="taxon:32630"

  Query Match              0.4%;  Score 15.4;  DB 1;  Length 20;
  Best Local Similarity   94.1%;  Pred. No. 1e+02;
  Matches   16;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       2209 GCCAGGATGAGGACTGG 2225
              ||||||||||||  ||||
Db         19 GCCAGGATGAGGGCTGG 3


RESULT 116
CQ829824/c
LOCUS       CQ829824                  20 bp    DNA     linear   PAT 05-JUL-2004
DEFINITION  Sequence 5 from Patent WO2004053116.
ACCESSION   CQ829824
VERSION     CQ829824.1  GI:49732949
KEYWORDS    .
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            other sequences; artificial sequences.
REFERENCE   1
  AUTHORS   Schwenzer,B., Schmidt,U., Wirth,M.P., Kraemer,K., Fuessel,S. and
            Meye,A.
  TITLE     Polynucleotides targeted against htert and use thereof
  JOURNAL   Patent: WO 2004053116-A 5 24-JUN-2004;
            Technische Universitaet Dresden (DE)
FEATURES             Location/Qualifiers
     source          1. .20
                     /organism="synthetic construct"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:32630"
                     /note="Beschreibung der k nstlichen Sequenz:
                     anti-hTERT-AS-Konstrukt"

  Query Match              0.4%;  Score 15.4;  DB 1;  Length 20;
  Best Local Similarity   94.1%;  Pred. No. 1e+02;
  Matches   16;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        468 AGCCACCTCTCTACCTT 484
              ||||||  ||||||||||
Db         17 AGCCACGTCTCTACCTT 1


RESULT 117
CQ867622
LOCUS       CQ867622                  20 bp    DNA     linear   PAT 13-SEP-2004
DEFINITION  Sequence 4 from Patent WO2004074830.
ACCESSION   CQ867622
VERSION     CQ867622.1  GI:51997814
KEYWORDS    .
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            other sequences; artificial sequences.
REFERENCE   1
  AUTHORS   Golz,S., Brueggemeier,U. and Summer,H.
  TITLE     Diagnostics and therapeutics for diseases associated with g-protein
            coupled receptor prostaglandin e2 ep3 iii (prostaglandin e2 ep3
            iii)
  JOURNAL   Patent: WO 2004074830-A 4 02-SEP-2004;
            Bayer HealthCare AG (DE)
FEATURES             Location/Qualifiers
     source          1. .20
                     /organism="synthetic construct"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:32630"
                     /note="reverse primer"

  Query Match              0.4%;  Score 15.4;  DB 1;  Length 20;
  Best Local Similarity   94.1%;  Pred. No. 1e+02;
  Matches   16;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       2834 TCAAGGAGCTTCCAGTG 2850
              ||| ||||||||||||||
Db          1 TCATGGAGCTTCCAGTG 17


RESULT 118
I25313
LOCUS       I25313                    20 bp    DNA     linear   PAT 07-OCT-1996
DEFINITION  Sequence 100 from patent US 5550020.
ACCESSION   I25313
VERSION     I25313.1  GI:1605183
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 20)
  AUTHORS   Gallie,B.L., Dunn,J.M. and Stevens,J.K.
  TITLE     Method, reagents and kit for diagnosis and targeted screening for
            retinoblastoma
  JOURNAL   Patent: US 5550020-A 100 27-AUG-1996;
FEATURES             Location/Qualifiers
     source          1. .20
                     /organism="unknown"
                     /mol_type="unassigned DNA"

  Query Match              0.4%;  Score 15.4;  DB 1;  Length 20;
  Best Local Similarity   94.1%;  Pred. No. 1e+02;
  Matches   16;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1830 ATAATGACTTCCAAAAA 1846
              |||||  ||||||||||
Db          4 ATAATAACTTCCAAAAA 20


RESULT 119
AR213949/c
LOCUS       AR213949                  20 bp    DNA     linear   PAT 25-SEP-2002
DEFINITION  Sequence 41 from patent US 6406846.
ACCESSION   AR213949
VERSION     AR213949.1  GI:23311368
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 20)
  AUTHORS   Whitcomb,D., Ehrlich,G.D. and Gorry,M.C.
  TITLE     Method for determining whether a human patient is susceptible to
            hereditary pancreatitis, and primers therefore
  JOURNAL   Patent: US 6406846-A 41 18-JUN-2002;
FEATURES             Location/Qualifiers
     source          1. .20
                     /organism="unknown"
                     /mol_type="genomic DNA"

  Query Match              0.4%;  Score 15.4;  DB 1;  Length 20;
  Best Local Similarity   94.1%;  Pred. No. 1e+02;
  Matches   16;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1098 TCATTTTCCCTGGTGAG 1114
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              ||||||||||||||| |
Db         19 TCATTTTCCCTGGTGGG 3


RESULT 120
AR317378
LOCUS       AR317378                 20 bp    DNA     linear   PAT 17-AUG-2003
DEFINITION  Sequence 30 from patent US 6562955.
ACCESSION   AR317378
VERSION     AR317378.1  GI:33698472
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 20)
  AUTHORS   Ishizuka,T., Ishiguro,T. and Saitoh,J.
  TITLE     Oligonucleotides for detection of Vibrio parahaemolyticus and
            detection method for Vibrio parahaemolyticus using the same
            oligonucleotides
  JOURNAL   Patent: US 6562955-A 30 13-MAY-2003;
FEATURES             Location/Qualifiers
     source          1. .20
                     /organism="unknown"
                     /mol_type="genomic DNA"

  Query Match             0.4%;  Score 15.4;  DB 1;  Length 20;
  Best Local Similarity   94.1%;  Pred. No. 1e+02;
  Matches   16;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1089 AATGTTTCTTCATTTTC 1105
              |||| |||||||||||||
Db          4 AATGATTCTTCATTTTC 20


RESULT 121
BD084033
LOCUS       BD084033                 20 bp    DNA     linear   PAT 27-AUG-2002
DEFINITION  Method for detecting thermostable hemolysin-analogous hemolysin
            gene of Vibrio parahaemolyticus.
ACCESSION   BD084033
VERSION     BD084033.1  GI:22629643
KEYWORDS    JP 2001340087-A/6.
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            other sequences; artificial sequences.
REFERENCE   1  (bases 1 to 20)
  AUTHORS   Ishizuka,T., Ishiguro,T. and Saito,J.
  TITLE     Method for detecting thermostable hemolysin-analogous hemolysin
            gene of Vibrio parahaemolyticus
  JOURNAL   Patent: JP 2001340087-A 6 11-DEC-2001;
            TOSOH CORP
COMMENT     OS   Artificial Sequence
            PN   JP 2001340087-A/6
            PD   11-DEC-2001
            PF   31-MAY-2000 JP 2000166504
            PI   TETSUYA ISHIZUKA,TAKAHIKO ISHIGURO,JUICHI SAITO PC
            C12N15/09,C12Q1/68,C12Q1/68,G01N33/53,G01N33/566,G01N33/569, PC
            G01N33/58//
            PC   C12Q1/04,(C12Q1/68,C12R1:63),(C12Q1/04,C12R1:63),C12N15/00 CC
             Primer
            FH   Key             Location/Qualifiers
            FT   source          1. .20
            FT                   /organism='Artificial Sequence'.
FEATURES             Location/Qualifiers
     source          1. .20
                     /organism="synthetic construct"
                     /mol_type="genomic DNA"
                     /db_xref="taxon:32630"

  Query Match             0.4%;  Score 15.4;  DB 1;  Length 20;
  Best Local Similarity   94.1%;  Pred. No. 1e+02;
  Matches   16;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1089 AATGTTTCTTCATTTTC 1105
              |||| |||||||||||||
Db          4 AATGATTCTTCATTTTC 20


RESULT 122
A86518
LOCUS       A86518                   20 bp    DNA     linear   PAT 21-JAN-2000
DEFINITION  Sequence 4 from Patent WO9839472.
ACCESSION   A86518
VERSION     A86518.1  GI:6735117
KEYWORDS    .
SOURCE      unidentified
  ORGANISM  unidentified
            unclassified.
REFERENCE   1  (bases 1 to 20)
  AUTHORS   Wagener,C.
  TITLE     METHOD FOR DETECTING MUTATED ALLELS
  JOURNAL   Patent: WO 9839472-A 4 11-SEP-1998;
            WAGENER CHRISTOPH (DE)
FEATURES             Location/Qualifiers
     source          1. .20
                     /organism="unidentified"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:32644"

  Query Match             0.4%;  Score 15.2;  DB 1;  Length 20;
  Best Local Similarity   85.0%;  Pred. No. 1.1e+02;
  Matches   17;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       3173 TTTTAAGTCTGTCTCCTTAC 3192
              ||| || |||||||||||| |
Db          1 TTTCAACTCTGTCTCCTTCC 20


RESULT 123
AR030970/c
LOCUS       AR030970                 20 bp    DNA     linear   PAT 29-SEP-1999
DEFINITION  Sequence 2 from patent US 5861501.
ACCESSION   AR030970
VERSION     AR030970.1  GI:5944184
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 20)
  AUTHORS   Benseler,F., Cole,J.L., Olsen,D.B. and Kuo,L.C.
  TITLE     Capped synthetic RNA, analogs, and aptamers
  JOURNAL   Patent: US 5861501-A 2 19-JAN-1999;
FEATURES             Location/Qualifiers
     source          1. .20
                     /organism="unknown"
                     /mol_type="unassigned DNA"

  Query Match             0.4%;  Score 15.2;  DB 1;  Length 20;
  Best Local Similarity   85.0%;  Pred. No. 1.1e+02;
  Matches   17;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       2683 GAAGAGGAAAAATAAAAACC 2702
              ||| |  ||||||||||||||
Db         20 GAAAATTAAAAATAAAAACC 1


RESULT 124
AR100074/c
LOCUS       AR100074                 20 bp    DNA     linear   PAT 14-FEB-2001
DEFINITION  Sequence 31 from patent US 6080546.
ACCESSION   AR100074
VERSION     AR100074.1  GI:12810522
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
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```
REFERENCE   1  (bases 1 to 20)
  AUTHORS   Monia,B.P., Gaarde,W. and Cowsert,L.M.
  TITLE     Antisense modulation of MEKK5 expression
  JOURNAL   Patent: US 6080546-A 31 27-JUN-2000;
FEATURES             Location/Qualifiers
     source          1. .20
                     /organism="unknown"
                     /mol_type="unassigned DNA"

  Query Match             0.4%;  Score 15.2;  DB 1;  Length 20;
  Best Local Similarity   85.0%;  Pred. No. 1.1e+02;
  Matches   17;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       2236 AGCTAGTAAAGAATTTAGAA 2255
                ||||  ||| ||| |||||||
Db         20 AGCTGGTAGAGACTTTAGAA 1


RESULT 125
AR108815/c
LOCUS       AR108815                 20 bp    DNA     linear   PAT 14-FEB-2001
DEFINITION  Sequence 2 from patent US 6111095.
ACCESSION   AR108815
VERSION     AR108815.1  GI:12824302
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 20)
  AUTHORS   Benseler,F., Cole,J.L., Olsen,D.B. and Kuo,L.C.
  TITLE     Capped synthetic RNA, analogs, and aptamers
  JOURNAL   Patent: US 6111095-A 2 29-AUG-2000;
FEATURES             Location/Qualifiers
     source          1. .20
                     /organism="unknown"
                     /mol_type="unassigned DNA"

  Query Match             0.4%;  Score 15.2;  DB 1;  Length 20;
  Best Local Similarity   85.0%;  Pred. No. 1.1e+02;
  Matches   17;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       2683 GAAGAGGAAAAATAAAAACC 2702
                |||  |  ||||||||||||
Db         20 GAAAATTAAAAATAAAAACC 1


RESULT 126
AR178882
LOCUS       AR178882                 20 bp    DNA     linear   PAT 20-APR-2002
DEFINITION  Sequence 128 from patent US 6319906.
ACCESSION   AR178882
VERSION     AR178882.1  GI:20220020
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 20)
  AUTHORS   Bennett,C.Frank. and Vickers,T.A.
  TITLE     Oligonucleotide compositions and methods for the modulation of the
            expression of B7 protein
  JOURNAL   Patent: US 6319906-A 128 20-NOV-2001;
FEATURES             Location/Qualifiers
     source          1. .20
                     /organism="unknown"
                     /mol_type="unassigned DNA"

  Query Match             0.4%;  Score 15.2;  DB 1;  Length 20;
  Best Local Similarity   85.0%;  Pred. No. 1.1e+02;
  Matches   17;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1317 TTGAGTTTCAAAGGTTGCTG 1336
                ||  |||||||  ||  ||||||
Db          1 TTTAGTTTCACAGCTTGCTG 20


RESULT 127
BD184152/c
LOCUS       BD184152                 20 bp    DNA     linear   PAT 17-JUN-2003
DEFINITION  Method and detector for identifying subtypes of human papiloma
            viruses.
ACCESSION   BD184152
VERSION     BD184152.1  GI:31876352
KEYWORDS    JP 2002360271-A/131.
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            other sequences; artificial sequences.
REFERENCE   1  (bases 1 to 20)
  AUTHORS   Ling,C., Lin,R., Yoo,Z., Huang,X., Lee,B., Lee,S., Lin,Y.,
            Huang,C., Hsu,H., Shi,C., Yeh,C., Cao,Y. and Pan,C.
  TITLE     Method and detector for identifying subtypes of human papiloma
  JOURNAL   Patent: JP 2002360271-A 131 17-DEC-2002;
            KING CAR FOOD INDUSTRIAL CO LTD
COMMENT     OS   Artificial Sequence
            PN   JP 2002360271-A/131
            PD   17-DEC-2002
            PF   28-NOV-2001 JP 2001362595
            PR   04-MAY-2001 TW     90110785
            PI   CHING-YEE LING,RUEY-WEN LIN,ZHOU-MENG YOO,XIN-HSUAN HUANG,BOW-
            PI   HAENG LEE,
            PI   SHENG-HSIUNG LEE,YI-JU LIN,CI-CHUNG HUANG,HAN-CHANG HSU,CHA-
            PI   WEN SHI,
            PI   CHIH-XIN YEH,YI-FENG CAO,CHIH-LONG PAN
            PC   C12N15/09,C12N15/09,C12M1/34,C12Q1/04,C12Q1/42,C12Q1/68 PC
            ,C12Q1/70,G01N21/64,
            PC   G01N33/53,G01N33/574,G01N33/58,G01N37/00//(C12M1/34,C12R1:93),
            PC   (C12Q1/70,C12R1:93),C12N15/00,C12N15/00
            CC   Oligonucleotide M3305 for identifying HPV 33. FH   Key
                Location/Qualifiers
            FT   source          1. .20
            FT                   /organism='Artificial Sequence'.
FEATURES             Location/Qualifiers
     source          1. .20
                     /organism="synthetic construct"
                     /mol_type="genomic DNA"
                     /db_xref="taxon:32630"

  Query Match             0.4%;  Score 15.2;  DB 1;  Length 20;
  Best Local Similarity   85.0%;  Pred. No. 1.1e+02;
  Matches   17;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       3304 ATTTTTATTTTTATATATCC 3323
                ||||| |||||||||| | |
Db         20 ATTTTCATTTTTATATGTAC 1


RESULT 128
BD184313/c
LOCUS       BD184313                 20 bp    DNA     linear   PAT 17-JUN-2003
DEFINITION  Method and detector for identifying subtypes of human papiloma
            viruses.
ACCESSION   BD184313
VERSION     BD184313.1  GI:31876513
KEYWORDS    JP 2002360271-A/292.
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            other sequences; artificial sequences.
REFERENCE   1  (bases 1 to 20)
  AUTHORS   Ling,C., Lin,R., Yoo,Z., Huang,X., Lee,B., Lee,S., Lin,Y.,
            Huang,C., Hsu,H., Shi,C., Yeh,C., Cao,Y. and Pan,C.
  TITLE     Method and detector for identifying subtypes of human papiloma
  JOURNAL   Patent: JP 2002360271-A 292 17-DEC-2002;
            KING CAR FOOD INDUSTRIAL CO LTD
COMMENT     OS   Artificial Sequence
            PN   JP 2002360271-A/292
            PD   17-DEC-2002
            PF   28-NOV-2001 JP 2001362595
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            PR   04-MAY-2001 TW     90110785
            PI   CHING-YEE LING,RUEY-WEN LIN,ZHOU-MENG YOO,XIN-HSUAN HUANG,BOW-
            PI   HAENG LEE,
            PI   SHENG-HSIUNG LEE,YI-JU LIN,CI-CHUNG HUANG,HAN-CHANG HSU,CHA-
            PI   WEN SHI,
            PI   CHIH-XIN YEH,YI-FENG CAO,CHIH-LONG PAN
            PC   C12N15/09,C12N15/09,C12M1/34,C12Q1/04,C12Q1/42,C12Q1/68 PC
            ,C12Q1/70,G01N21/64,
            PC   G01N33/53,G01N33/574,G01N33/58,G01N37/00//(C12M1/34,C12R1:93),
            PC   (C12Q1/70,C12R1:93),C12N15/00,C12N15/00
            CC   Oligonucleotide M5206 for identifying HPV 52. FH   Key
                 Location/Qualifiers
            FT   source          1. .20
            FT                   /organism='Artificial Sequence'.
FEATURES             Location/Qualifiers
     source          1. .20
                     /organism="synthetic construct"
                     /mol_type="genomic DNA"
                     /db_xref="taxon:32630"

  Query Match              0.4%;  Score 15.2;  DB 1;  Length 20;
  Best Local Similarity   85.0%;  Pred. No. 1.1e+02;
  Matches   17;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       3304 ATTTTTATTTTTATATATCC 3323
              ||||| |||||||||| | |
Db         20 ATTTTCATTTTTATATGTGC 1


RESULT 129
E13800
LOCUS       E13800                    20 bp    DNA     linear   PAT 27-APR-1998
DEFINITION  PCR primer for discriminating genotype 2a of HCV (Hepatitis C
            virus).
ACCESSION   E13800
VERSION     E13800.1  GI:3252568
KEYWORDS    JP 1997234072-A/52.
SOURCE      unidentified
  ORGANISM  unidentified
            unclassified.
REFERENCE   1  (bases 1 to 20)
  AUTHORS   Ono,T., Mukaide,M., Hikichi,K. and Mizogami,M.
  TITLE     NEW OLIGONUCLEOTIDE, PRIMER FOR DISCRIMINATION IN GENOTYPE OF
            HEPATITIS C VIRUS COMPRISING THE SAME AND DISCRIMINATION IN
            GENOTYPE OF HEPATITIS C VIRUS BY USING THE PRIMER
  JOURNAL   Patent: JP 1997234072-A 52 09-SEP-1997;
            S R L:KK
COMMENT     OS   None
            OC   Artificial sequences.
            PN   JP 1997234072-A/52
            PD   09-SEP-1997
            PF   01-FEB-1996 JP 1996038875
            PR   01-FEB-1995 JP 95P    35997, 30-DEC-1995 JP 95P   352511 PI
            ONO TOMOYOSHI, MUKAIDE MASAKAZU, HIKICHI KAZUMASA, PI   MIZOGAMI
            MASAFUMI
            PC   C12N15/09,C07H21/04,C12Q1/68,C12Q1/70,(C12N15/09,C12R1:92); CC
              strandedness: Single;
            CC   topology: Linear;
            CC   hypothetical: No;
            CC   anti-sense: No;
            FH   Key             Location/Qualifiers
            FH
            FT   source          1. .20
            FT                   /organism='Artificial sequences' FT
            misc_feature    1. .20
            FT                   /note='Primer,OMM2aA'.
FEATURES             Location/Qualifiers
     source          1. .20
                     /organism="unidentified"
                     /mol_type="genomic DNA"
                     /db_xref="taxon:32644"

  Query Match              0.4%;  Score 15.2;  DB 1;  Length 20;
  Best Local Similarity   85.0%;  Pred. No. 1.1e+02;
  Matches   17;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       3762 CAGATGGCTGGGATCCCTCC 3781
              ||  |||||||||||| ||||
Db          1 CACGTGGCTGGGATCGCTCC 20


RESULT 130
I21071
LOCUS       I21071                    20 bp    DNA     linear   PAT 07-OCT-1996
DEFINITION  Sequence 42 from patent US 5518880.
ACCESSION   I21071
VERSION     I21071.1  GI:1601425
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 20)
  AUTHORS   Leonard,W.J., Noguchi,M. and McBride,O.Wesley.
  TITLE     Methods for diagnosis of XSCID and kits thereof
  JOURNAL   Patent: US 5518880-A 42 21-MAY-1996;
FEATURES             Location/Qualifiers
     source          1. .20
                     /organism="unknown"
                     /mol_type="unassigned DNA"

  Query Match              0.4%;  Score 15.2;  DB 1;  Length 20;
  Best Local Similarity   85.0%;  Pred. No. 1.1e+02;
  Matches   17;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       2093 AGTATCTGTTGTAGCAGTTC 2112
              || |||||||||  ||||||
Db          1 AGAATCTGTTGTTCCAGTTC 20


RESULT 131
I23988/c
LOCUS       I23988                    20 bp    DNA     linear   PAT 07-OCT-1996
DEFINITION  Sequence 17 from patent US 5541095.
ACCESSION   I23988
VERSION     I23988.1  GI:1603858
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 20)
  AUTHORS   Hirschberg,C.B., Orellana,A., Hashimoto,Y., Swiedler,S.J., Wei,Z.
            and Ishihara,M.
  TITLE     Glycosaminoglycan specific sulfotransferases
  JOURNAL   Patent: US 5541095-A 17 30-JUL-1996;
FEATURES             Location/Qualifiers
     source          1. .20
                     /organism="unknown"
                     /mol_type="unassigned DNA"

  Query Match              0.4%;  Score 15.2;  DB 1;  Length 20;
  Best Local Similarity   85.0%;  Pred. No. 1.1e+02;
  Matches   17;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1840 CCAAAAAACAGGAACTACAG 1859
              ||| |||||||| || |||||
Db         20 CCAGAAAACAGGCACCACAG 1


RESULT 132
AR205764/c
LOCUS       AR205764                  20 bp    DNA     linear   PAT 20-JUN-2002
DEFINITION  Sequence 2 from patent US 6369208.
ACCESSION   AR205764
VERSION     AR205764.1  GI:21503429
KEYWORDS    .
SOURCE      Unknown.
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  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 20)
  AUTHORS   Cole,J.L., Kuo,L.C., Olsen,D.B. and Benseler,F.
  TITLE     Capped synthetic RNA, analogs, and aptamers
  JOURNAL   Patent: US 6369208-A 2 09-APR-2002;
FEATURES             Location/Qualifiers
     source          1. .20
                     /organism="unknown"
                     /mol_type="unassigned DNA"

  Query Match             0.4%;  Score 15.2;  DB 1;  Length 20;
  Best Local Similarity   85.0%;  Pred. No. 1.1e+02;
  Matches   17;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       2683 GAAGAGGAAAAATAAAAACC 2702
              ||| |  ||||||||||||||
Db         20 GAAAATTAAAAATAAAAACC 1


RESULT 133
AR233731
LOCUS       AR233731                  20 bp    DNA     linear   PAT 20-DEC-2002
DEFINITION  Sequence 93 from patent US 6458536.
ACCESSION   AR233731
VERSION     AR233731.1  GI:27276355
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 20)
  AUTHORS   Gatti,R.A.
  TITLE     Modified SSCP method using sequential electrophoresis of multiple
            nucleic acid segments
  JOURNAL   Patent: US 6458536-A 93 01-OCT-2002;
FEATURES             Location/Qualifiers
     source          1. .20
                     /organism="unknown"
                     /mol_type="genomic DNA"

  Query Match             0.4%;  Score 15.2;  DB 1;  Length 20;
  Best Local Similarity   85.0%;  Pred. No. 1.1e+02;
  Matches   17;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1989 TGTGCAACACCTTCAGATAA 2008
              | ||||||||||||||  |||
Db          1 TTTGCAACACCTTCACCTAA 20


RESULT 134
AR307940/c
LOCUS       AR307940                  20 bp    DNA     linear   PAT 12-JUN-2003
DEFINITION  Sequence 151 from patent US 6551826.
ACCESSION   AR307940
VERSION     AR307940.1  GI:31698696
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 20)
  AUTHORS   Watt,A.T.
  TITLE     Antisense modulation of raidd expression
  JOURNAL   Patent: US 6551826-A 151 22-APR-2003;
FEATURES             Location/Qualifiers
     source          1. .20
                     /organism="unknown"
                     /mol_type="genomic DNA"

  Query Match             0.4%;  Score 15.2;  DB 1;  Length 20;
  Best Local Similarity   85.0%;  Pred. No. 1.1e+02;
  Matches   17;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        489 TTGACAGGAAACCCCATCCA 508
              ||||||| ||||| ||| ||
Db         20 TTGACAGAAAACCACATTCA 1


RESULT 135
AR311481/c
LOCUS       AR311481                  20 bp    DNA     linear   PAT 12-JUN-2003
DEFINITION  Sequence 2018 from patent US 6559294.
ACCESSION   AR311481
VERSION     AR311481.1  GI:31704907
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 20)
  AUTHORS   Griffais,R., Hoiseth,S.K., Zagursky,R.J., Metcalf,B.J., Peek,J.A.,
            Sankaran,B. and Fletcher,L.D.
  TITLE     Chlamydia pneumoniae polynucleotides and uses thereof
  JOURNAL   Patent: US 6559294-A 2018 06-MAY-2003;
FEATURES             Location/Qualifiers
     source          1. .20
                     /organism="unknown"
                     /mol_type="genomic DNA"

  Query Match             0.4%;  Score 15.2;  DB 1;  Length 20;
  Best Local Similarity   85.0%;  Pred. No. 1.1e+02;
  Matches   17;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1617 GAAAACTTCCTTCCAGATAT 1636
              |||||||||| |||||  ||
Db         20 GAAAACTTCCCTCCAGTCAT 1


RESULT 136
AR337006/c
LOCUS       AR337006                  20 bp    DNA     linear   PAT 17-AUG-2003
DEFINITION  Sequence 67 from patent US 6566132.
ACCESSION   AR337006
VERSION     AR337006.1  GI:33722860
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 20)
  AUTHORS   Watt,A.T.
  TITLE     Antisense modulation of Interferon gamma receptor 1 expression
  JOURNAL   Patent: US 6566132-A 67 20-MAY-2003;
FEATURES             Location/Qualifiers
     source          1. .20
                     /organism="unknown"
                     /mol_type="genomic DNA"

  Query Match             0.4%;  Score 15.2;  DB 1;  Length 20;
  Best Local Similarity   85.0%;  Pred. No. 1.1e+02;
  Matches   17;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1689 GAGCAGTTGTCTCCAACAGC 1708
              |||| |||||||||| || |
Db         20 GAGCCGTTGTCTCCAGCAAC 1


RESULT 137
AX295081
LOCUS       AX295081                  20 bp    DNA     linear   PAT 21-NOV-2001
DEFINITION  Sequence 6843 from Patent WO0179548.
ACCESSION   AX295081
VERSION     AX295081.1  GI:17056764
KEYWORDS    .
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            other sequences; artificial sequences.
REFERENCE   1
  AUTHORS   Barany,F., Zirvi,M., Gerry,N.P., Favis,R. and Kliman,R.
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  TITLE     Method of designing addressable array for detection of nucleic acid
            sequence differences using ligase detection reaction
  JOURNAL   Patent: WO 0179548-A 6843 25-OCT-2001;
            CORNELL RESEARCH FOUNDATION, INC. (US)
FEATURES             Location/Qualifiers
     source          1. .20
                     /organism="synthetic construct"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:32630"
                     /note="Hypothetical Probe Sequence"

  Query Match             0.4%;  Score 15.2;  DB 1;  Length 20;
  Best Local Similarity   85.0%;  Pred. No. 1.1e+02;
  Matches   17;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1346 TGATTTTGGGACAACCAGCC 1365
              ||||| |||||| | |||||
Db          1 TGATTCTGGGACCAGCAGCC 20


RESULT 138
AX544171/c
LOCUS       AX544171                 20 bp    DNA     linear   PAT 23-NOV-2002
DEFINITION  Sequence 45 from Patent WO02061109.
ACCESSION   AX544171
VERSION     AX544171.1  GI:25277733
KEYWORDS    .
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            other sequences; artificial sequences.
REFERENCE   1
  AUTHORS   Spagnoli,R., Achstetter,T., Cauet,G., Degryse,E., Dumas,B.,
            Pompon,D. and Winter,J.
  TITLE     Yeast strains autonomously producing steroids
  JOURNAL   Patent: WO 02061109-A 45 08-AUG-2002;
            Aventis Pharma S.A. (FR)
FEATURES             Location/Qualifiers
     source          1. .20
                     /organism="synthetic construct"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:32630"
                     /note="Oligonucleotide leu2D"

  Query Match             0.4%;  Score 15.2;  DB 1;  Length 20;
  Best Local Similarity   85.0%;  Pred. No. 1.1e+02;
  Matches   17;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1558 GCATCTTCAATGGCTTGTCC 1577
              ||||||||||||| |  ||
Db         20 GCATCTTCAATGGCCTTACC 1


RESULT 139
AX742328/c
LOCUS       AX742328                 20 bp    DNA     linear   PAT 12-MAY-2003
DEFINITION  Sequence 131 from Patent EP1302550.
ACCESSION   AX742328
VERSION     AX742328.1  GI:30576296
KEYWORDS    .
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            other sequences; artificial sequences.
REFERENCE   1
  AUTHORS   Lin,C.Y., Lin,R.W., You,C.M., Huang,H.H., Lee,B.H., Lee,H.H.,
            Lin,Y.J., Fan,C.C., Hsu,H.C., Shih,C.W., Yeh,C.H., Kao,Y.F.,
            Pan,C.L. and Chan,P.
  TITLE     Method and detector for identifying subtypes of human papilloma
            viruses
  JOURNAL   Patent: EP 1302550-A 131 16-APR-2003;
            King Car Food Industrial Co., Ltd. (TW)
FEATURES             Location/Qualifiers
     source          1. .20
                     /organism="synthetic construct"
                     /mol_type="genomic DNA"
                     /db_xref="taxon:32630"
                     /note="Oligonucleotide for Identifying HPV 33"

  Query Match             0.4%;  Score 15.2;  DB 1;  Length 20;
  Best Local Similarity   85.0%;  Pred. No. 1.1e+02;
  Matches   17;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       3304 ATTTTTATTTTTATATATCC 3323
              ||||| |||||||||| | |
Db         20 ATTTTCATTTTTATATGTAC 1


RESULT 140
AX742460/c
LOCUS       AX742460                 20 bp    DNA     linear   PAT 12-MAY-2003
DEFINITION  Sequence 263 from Patent EP1302550.
ACCESSION   AX742460
VERSION     AX742460.1  GI:30576428
KEYWORDS    .
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            other sequences; artificial sequences.
REFERENCE   1
  AUTHORS   Lin,C.Y., Lin,R.W., You,C.M., Huang,H.H., Lee,B.H., Lee,H.H.,
            Lin,Y.J., Fan,C.C., Hsu,H.C., Shih,C.W., Yeh,C.H., Kao,Y.F.,
            Pan,C.L. and Chan,P.
  TITLE     Method and detector for identifying subtypes of human papilloma
            viruses
  JOURNAL   Patent: EP 1302550-A 263 16-APR-2003;
            King Car Food Industrial Co., Ltd. (TW)
FEATURES             Location/Qualifiers
     source          1. .20
                     /organism="synthetic construct"
                     /mol_type="genomic DNA"
                     /db_xref="taxon:32630"
                     /note="Oligonucleotide for Identifying HPV 52"

  Query Match             0.4%;  Score 15.2;  DB 1;  Length 20;
  Best Local Similarity   85.0%;  Pred. No. 1.1e+02;
  Matches   17;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       3304 ATTTTTATTTTTATATATCC 3323
              ||||| |||||||||| | |
Db         20 ATTTTCATTTTTATATGTGC 1


RESULT 141
AX962807/c
LOCUS       AX962807                 20 bp    DNA     linear   PAT 14-JAN-2004
DEFINITION  Sequence 63 from Patent WO03104458.
ACCESSION   AX962807
VERSION     AX962807.1  GI:40881920
KEYWORDS    .
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            other sequences; artificial sequences.
REFERENCE   1
  AUTHORS   Baker,B.F., Freier,S.M. and Dobie,K.W.
  TITLE     Antisense modulation of il-1 receptor-associated kinase-1
            expression
  JOURNAL   Patent: WO 03104458-A 63 18-DEC-2003;
            ISIS PHARMACEUTICALS, INC. (US)
FEATURES             Location/Qualifiers
     source          1. .20
                     /organism="synthetic construct"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:32630"
                     /note="Antisense Oligonucleotide"

  Query Match             0.4%;  Score 15.2;  DB 1;  Length 20;
  Best Local Similarity   85.0%;  Pred. No. 1.1e+02;
  Matches   17;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;
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Qy        460 AGAGCCTAAGCCACCTCTCT 479
              |||||||| ||  |||||||
Db         20 AGAGCCTAGGCGGCCTCTCT 1


RESULT 142
AX962873
LOCUS       AX962873                 20 bp    DNA     linear   PAT 14-JAN-2004
DEFINITION  Sequence 129 from Patent WO03104458.
ACCESSION   AX962873
VERSION     AX962873.1  GI:40881996
KEYWORDS    .
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1
  AUTHORS   Baker,B.F., Freier,S.M. and Dobie,K.W.
  TITLE     Antisense modulation of il-1 receptor-associated kinase-1
            expression
  JOURNAL   Patent: WO 03104458-A 129 18-DEC-2003;
            ISIS PHARMACEUTICALS, INC. (US)
FEATURES             Location/Qualifiers
     source          1. .20
                     /organism="Homo sapiens"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:9606"

  Query Match             0.4%;  Score 15.2;  DB 1;  Length 20;
  Best Local Similarity   85.0%;  Pred. No. 1.1e+02;
  Matches   17;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        460 AGAGCCTAAGCCACCTCTCT 479
              |||||||| ||  |||||||
Db          1 AGAGCCTAGGCGGCCTCTCT 20


RESULT 143
BD070557
LOCUS       BD070557                 20 bp    DNA     linear   PAT 27-AUG-2002
DEFINITION  Method for detecting mutated alleles.
ACCESSION   BD070557
VERSION     BD070557.1  GI:22616160
KEYWORDS    JP 2001514504-A/4.
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            other sequences; artificial sequences.
REFERENCE   1  (bases 1 to 20)
  AUTHORS   Wagner,C.
  TITLE     Method for detecting mutated alleles
  JOURNAL   Patent: JP 2001514504-A 4 11-SEP-2001;
            CHRISTOPH WAGNER
COMMENT     OS   Artificial Sequence
            PN   JP 2001514504-A/4
            PD   11-SEP-2001
            PF   04-MAR-1998 JP 1998538071
            PR   04-MAR-1997 DE 197 08 758.2
            PI   CHRISTOPH WAGNER
            PC   C12Q1/68
            CC   Description of the Artificial sequence: oligonucleotides FH
            Key             Location/Qualifiers
            FT   source          1. .20
            FT                   /organism='Artificial Sequence'.
FEATURES             Location/Qualifiers
     source          1. .20
                     /organism="synthetic construct"
                     /mol_type="genomic DNA"
                     /db_xref="taxon:32630"

  Query Match             0.4%;  Score 15.2;  DB 1;  Length 20;
  Best Local Similarity   85.0%;  Pred. No. 1.1e+02;
  Matches   17;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       3173 TTTTAAGTCTGTCTCCTTAC 3192
              ||| || |||||||||||| |
Db          1 TTTCAACTCTGTCTCCTTCC 20


RESULT 144
AR023742
LOCUS       AR023742                 17 bp    DNA     linear   PAT 05-DEC-1998
DEFINITION  Sequence 24 from patent US 5795726.
ACCESSION   AR023742
VERSION     AR023742.1  GI:3977036
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 17)
  AUTHORS   Glucksmann,M.Alexandra.
  TITLE     Methods for identifying compounds useful in treating type II
            diabetes
  JOURNAL   Patent: US 5795726-A 24 18-AUG-1998;
FEATURES             Location/Qualifiers
     source          1. .17
                     /organism="unknown"
                     /mol_type="unassigned DNA"

  Query Match             0.4%;  Score 15;  DB 1;  Length 17;
  Best Local Similarity   100.0%;  Pred. No. 89;
  Matches   15;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        402 CTGCAGGTGCTGGAT 416
              |||||||||||||||
Db          2 CTGCAGGTGCTGGAT 16


RESULT 145
AR036967
LOCUS       AR036967                 17 bp    DNA     linear   PAT 29-SEP-1999
DEFINITION  Sequence 21 from patent US 5800998.
ACCESSION   AR036967
VERSION     AR036967.1  GI:5954823
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 17)
  AUTHORS   Glucksmann,M.Alexandra.
  TITLE     Assays for diagnosing type II diabetes in a subject
  JOURNAL   Patent: US 5800998-A 21 01-SEP-1998;
FEATURES             Location/Qualifiers
     source          1. .17
                     /organism="unknown"
                     /mol_type="unassigned DNA"

  Query Match             0.4%;  Score 15;  DB 1;  Length 17;
  Best Local Similarity   100.0%;  Pred. No. 89;
  Matches   15;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        402 CTGCAGGTGCTGGAT 416
              |||||||||||||||
Db          2 CTGCAGGTGCTGGAT 16


RESULT 146
BD256407/c
LOCUS       BD256407                 17 bp    DNA     linear   PAT 17-JUL-2003
DEFINITION  Regulation of repressor genes using nucleic acid molecules.
ACCESSION   BD256407
VERSION     BD256407.1  GI:33066177
KEYWORDS    JP 2002541795-A/4200.
SOURCE      unidentified
  ORGANISM  unidentified
            unclassified.
```

```
REFERENCE   1  (bases 1 to 17)
  AUTHORS   Blatt,L., Zwick,M., Pavco,P. and Mcswiggen,J.
  TITLE     Regulation of repressor genes using nucleic acid molecules
  JOURNAL   Patent: JP 2002541795-A 4200 10-DEC-2002;
            RIBOZYME PHARMACEUTICALS INC
COMMENT     OS   Eukaryote
            PN   JP 2002541795-A/4200
            PD   10-DEC-2002
            PF   11-APR-2000 JP 2000611654
            PR   12-APR-1999 US    60/129390
            PI   LAWRENCE BLATT,MICHAEL ZWICK,PAMELA PAVCO,JAMES MCSWIGGEN PC
            C12N15/09,A61K38/00,A61K48/00,A61P43/00,A61P43/00,C12N5/10, PC
            C12P21/02,
            PC
            C12P21/02,C12P21/02//A61K31/711,(C12N5/10,C12R1:91),(C12P21/02, PC
             C12R1:91),
            PC   (C12P21/02,C12R1:91),(C12P21/02,C12R1:91),C12N15/00,C12N5/00,
            PC   A61K37/02,
            PC   (C12N5/00,C12R1:91)
            CC   Regulation of repressor genes using nucleic acid molecules FH
             Key             Location/Qualifiers
            FT   source          1. .17
            FT                   /organism='Eukaryote'.
FEATURES              Location/Qualifiers
     source           1. .17
                      /organism="unidentified"
                      /mol_type="genomic DNA"
                      /db_xref="taxon:32644"

  Query Match              0.4%;  Score 15;  DB 1;  Length 17;
  Best Local Similarity   100.0%;  Pred. No. 89;
  Matches   15;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1896 CAGAATGACTTTGCT 1910
             |||||||||||||||
Db         15 CAGAATGACTTTGCT 1


RESULT 147
BD256855/c
LOCUS       BD256855                  17 bp    DNA     linear   PAT 17-JUL-2003
DEFINITION  Regulation of repressor genes using nucleic acid molecules.
ACCESSION   BD256855
VERSION     BD256855.1  GI:33066625
KEYWORDS    JP 2002541795-A/4648.
SOURCE      unidentified
  ORGANISM  unidentified
            unclassified.
REFERENCE   1  (bases 1 to 17)
  AUTHORS   Blatt,L., Zwick,M., Pavco,P. and Mcswiggen,J.
  TITLE     Regulation of repressor genes using nucleic acid molecules
  JOURNAL   Patent: JP 2002541795-A 4648 10-DEC-2002;
            RIBOZYME PHARMACEUTICALS INC
COMMENT     OS   Eukaryote
            PN   JP 2002541795-A/4648
            PD   10-DEC-2002
            PF   11-APR-2000 JP 2000611654
            PR   12-APR-1999 US    60/129390
            PI   LAWRENCE BLATT,MICHAEL ZWICK,PAMELA PAVCO,JAMES MCSWIGGEN PC
            C12N15/09,A61K38/00,A61K48/00,A61P43/00,A61P43/00,C12N5/10, PC
            C12P21/02,
            PC
            C12P21/02,C12P21/02//A61K31/711,(C12N5/10,C12R1:91),(C12P21/02, PC
             C12R1:91),
            PC   (C12P21/02,C12R1:91),(C12P21/02,C12R1:91),C12N15/00,C12N5/00,
            PC   A61K37/02,
            PC   (C12N5/00,C12R1:91)
            CC   Regulation of repressor genes using nucleic acid molecules FH
             Key             Location/Qualifiers
            FT   source          1. .17
            FT                   /organism='Eukaryote'.
FEATURES              Location/Qualifiers
     source           1. .17
                      /organism="unidentified"
                      /mol_type="genomic DNA"
                      /db_xref="taxon:32644"

  Query Match              0.4%;  Score 15;  DB 1;  Length 17;
  Best Local Similarity   100.0%;  Pred. No. 89;
  Matches   15;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1896 CAGAATGACTTTGCT 1910
             |||||||||||||||
Db         15 CAGAATGACTTTGCT 1


RESULT 148
AX217411/c
LOCUS       AX217411                  17 bp    RNA     linear   PAT 07-SEP-2001
DEFINITION  Sequence 2853 from Patent WO0159103.
ACCESSION   AX217411
VERSION     AX217411.1  GI:15527472
KEYWORDS    .
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            other sequences; artificial sequences.
REFERENCE   1
  AUTHORS   Blatt,L., Mcswiggen,J. and Chowrira,B.M.
  TITLE     Method and reagent for the modulation and diagnosis of cd20 and
            nogo gene expression
  JOURNAL   Patent: WO 0159103-A 2853 16-AUG-2001;
            RIBOZYME PHARMACEUTICALS, INC. (US) ; Blatt, Lawrence (US) ;
            McSwiggen, James (US) ; Chowrira, Bharat M. (US)
FEATURES              Location/Qualifiers
     source           1. .17
                      /organism="synthetic construct"
                      /mol_type="unassigned RNA"
                      /db_xref="taxon:32630"
                      /note="Nucleic Acid"

  Query Match              0.4%;  Score 15;  DB 1;  Length 17;
  Best Local Similarity   100.0%;  Pred. No. 89;
  Matches   15;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       3797 CTGACAGGAGAACTA 3811
             |||||||||||||||
Db         16 CTGACAGGAGAACTA 2


RESULT 149
AX217777/c
LOCUS       AX217777                  17 bp    RNA     linear   PAT 07-SEP-2001
DEFINITION  Sequence 3219 from Patent WO0159103.
ACCESSION   AX217777
VERSION     AX217777.1  GI:15527838
KEYWORDS    .
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            other sequences; artificial sequences.
REFERENCE   1
  AUTHORS   Blatt,L., Mcswiggen,J. and Chowrira,B.M.
  TITLE     Method and reagent for the modulation and diagnosis of cd20 and
            nogo gene expression
  JOURNAL   Patent: WO 0159103-A 3219 16-AUG-2001;
            RIBOZYME PHARMACEUTICALS, INC. (US) ; Blatt, Lawrence (US) ;
            McSwiggen, James (US) ; Chowrira, Bharat M. (US)
FEATURES              Location/Qualifiers
     source           1. .17
                      /organism="synthetic construct"
                      /mol_type="unassigned RNA"
                      /db_xref="taxon:32630"
                      /note="Nucleic Acid"

  Query Match              0.4%;  Score 15;  DB 1;  Length 17;
  Best Local Similarity   100.0%;  Pred. No. 89;
  Matches   15;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;
```

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Qy       3797 CTGACAGGAGAACTA 3811
              |||||||||||||||
Db         17 CTGACAGGAGAACTA 3


RESULT 150
AX217778/c
LOCUS       AX217778                 17 bp    RNA     linear   PAT 07-SEP-2001
DEFINITION  Sequence 3220 from Patent WO0159103.
ACCESSION   AX217778
VERSION     AX217778.1  GI:15527839
KEYWORDS    .
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            other sequences; artificial sequences.
REFERENCE   1
  AUTHORS   Blatt,L., Mcswiggen,J. and Chowrira,B.M.
  TITLE     Method and reagent for the modulation and diagnosis of cd20 and
            nogo gene expression
  JOURNAL   Patent: WO 0159103-A 3220 16-AUG-2001;
            RIBOZYME PHARMACEUTICALS, INC. (US) ; Blatt, Lawrence (US) ;
            McSwiggen, James (US) ; Chowrira, Bharat M. (US)
FEATURES             Location/Qualifiers
     source          1. .17
                     /organism="synthetic construct"
                     /mol_type="unassigned RNA"
                     /db_xref="taxon:32630"
                     /note="Nucleic Acid"

  Query Match             0.4%;  Score 15;  DB 1;  Length 17;
  Best Local Similarity   100.0%;  Pred. No. 89;
  Matches   15;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       3797 CTGACAGGAGAACTA 3811
              |||||||||||||||
Db         15 CTGACAGGAGAACTA 1


RESULT 151
AR085548/c
LOCUS       AR085548                 20 bp    DNA     linear   PAT 01-SEP-2000
DEFINITION  Sequence 26 from patent US 5981731.
ACCESSION   AR085548
VERSION     AR085548.1  GI:10012315
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 20)
  AUTHORS   Monia,B.P.
  TITLE     Antisense oligonucleotide modulation of B-raf gene expression
  JOURNAL   Patent: US 5981731-A 26 09-NOV-1999;
FEATURES             Location/Qualifiers
     source          1. .20
                     /organism="unknown"
                     /mol_type="unassigned DNA"

  Query Match             0.4%;  Score 15;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1.1e+02;
  Matches   15;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1467 AAACAAATGAGTGAG 1481
              |||||||||||||||
Db         20 AAACAAATGAGTGAG 6


RESULT 152
AR216068/c
LOCUS       AR216068                 20 bp    DNA     linear   PAT 25-SEP-2002
DEFINITION  Sequence 115 from patent US 6410518.
ACCESSION   AR216068
VERSION     AR216068.1  GI:23314356
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 20)
  AUTHORS   Monia,B.P.
  TITLE     Antisense oligonucleotide inhibition of raf gene expression
  JOURNAL   Patent: US 6410518-A 115 25-JUN-2002;
FEATURES             Location/Qualifiers
     source          1. .20
                     /organism="unknown"
                     /mol_type="genomic DNA"

  Query Match             0.4%;  Score 15;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1.1e+02;
  Matches   15;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1467 AAACAAATGAGTGAG 1481
              |||||||||||||||
Db         20 AAACAAATGAGTGAG 6


RESULT 153
AR226207
LOCUS       AR226207                 20 bp    DNA     linear   PAT 20-DEC-2002
DEFINITION  Sequence 88 from patent US 6444466.
ACCESSION   AR226207
VERSION     AR226207.1  GI:27264361
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 20)
  AUTHORS   Ward,D.T. and Watt,A.T.
  TITLE     Antisense modulation of helicase-moi expression
  JOURNAL   Patent: US 6444466-A 88 03-SEP-2002;
FEATURES             Location/Qualifiers
     source          1. .20
                     /organism="unknown"
                     /mol_type="genomic DNA"

  Query Match             0.4%;  Score 15;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1.1e+02;
  Matches   15;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2331 ATCCATGAAGGTTTC 2345
              |||||||||||||||
Db          4 ATCCATGAAGGTTTC 18


Search completed: February 16, 2005, 09:21:47
Job time : 8 secs
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OM nucleic - nucleic search, using sw model

Run on: February 16, 2005, 09:23:05 ; Search time 15 Seconds
(without alignments)
3.633 Million cell updates/sec

Title: us-10-001-863-3
Perfect score: 3811
Sequence: 1 acagggccactgctgctcac.....tctcactgacaggagaacta 3811

Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 0.5

Searched: 352 seqs, 7150 residues

Total number of hits satisfying chosen parameters: 704

Minimum DB seq length: 8
Maximum DB seq length: 80

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 352 summaries

Database : rngdb:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.		Score	% Query Match	Length	DB	ID	Description
1		50	1.3	50	1	ABZ02491	Human leukocyte ge
2	c	30	0.8	30	1	AAC84833	399Reverse primer
3	c	30	0.8	30	1	AAD46775	Human TLR4 (Toll-l
4		29.4	0.8	31	1	AAC84832	399Forward primer
5		28.4	0.7	30	1	AAC84830	299Forward primer
6	c	27	0.7	27	1	AAC84831	299Reverse primer
7	c	26	0.7	26	1	AAC84807	Human TLR4 gene ex
8	c	24	0.6	24	1	AAI71236	Human Toll like re
9	c	24	0.6	24	1	AAC84805	Human TLR4 gene ex
10	c	24	0.6	24	1	AAC84810	Human TLR4 gene ex
11		24	0.6	24	1	AAD46774	Human TLR4 (Toll-l
12	c	24	0.6	24	1	AAL41014	Anti-CD14 monoclon
13		24	0.6	24	1	ACC43816	Sense PCR primer f
14		24	0.6	24	1	ADR83260	Human toll-like re
15		23	0.6	23	1	AAC84796	Human TLR4 gene ex
16		23	0.6	23	1	AAC84783	Human TLR4 gene ex
17		23	0.6	23	1	AAC84787	Human TLR4 gene ex
18	c	23	0.6	23	1	AAC84808	Human TLR4 gene ex
19	c	22.4	0.6	24	1	ACC43826	Antisense PCR prim
20		22	0.6	22	1	AAC84786	Human TLR4 gene ex
21	c	22	0.6	22	1	AAC84806	Human TLR4 gene ex
22		21.2	0.6	27	1	AAX73769	Mouse flt-1 VEGF r
23		21.2	0.6	27	1	AAX67583	Human flt1 VEGF re
24		21	0.6	21	1	AAC84784	Human TLR4 gene ex
25	c	21	0.6	21	1	AAC84803	Human TLR4 gene ex
26	c	21	0.6	21	1	AAC84823	Human TLR4 gene ex
27	c	21	0.6	21	1	ACC70796	Human Toll-like re
28	c	21	0.6	25	1	ADF17209	Human toll-like re
29	c	20.2	0.5	25	1	ACC74143	Probe for detectin
30		20	0.5	20	1	AAI71235	Human Toll like re
31	c	20	0.5	20	1	AAC84818	Human TLR4 gene ex
32		20	0.5	20	1	AAC84789	Human TLR4 gene ex
33		20	0.5	20	1	AAC84791	Human TLR4 gene ex
34		20	0.5	20	1	AAC84798	Human TLR4 gene ex
35	c	20	0.5	20	1	AAC84821	Human TLR4 gene ex
36	c	20	0.5	20	1	AAC84775	Human TLR4 gene am
37		20	0.5	20	1	AAC84785	Human TLR4 gene ex
38		20	0.5	20	1	AAC84792	Human TLR4 gene ex
39		20	0.5	20	1	AAC84799	Human TLR4 gene ex
40	c	20	0.5	20	1	AAC84825	Reverse primer der
41	c	20	0.5	20	1	AAC84812	Human TLR4 gene ex
42		20	0.5	20	1	AAC84774	Human TLR4 gene am
43	c	20	0.5	20	1	AAC84804	Human TLR4 gene ex
44	c	20	0.5	20	1	AAC84813	Human TLR4 gene ex
45	c	20	0.5	20	1	AAC84820	Human TLR4 gene ex
46	c	20	0.5	20	1	AAC84822	Human TLR4 gene ex
47	c	20	0.5	20	1	AAC84773	Human TLR4 gene am
48		20	0.5	20	1	AAC84781	Human TLR4 gene ex
49		20	0.5	20	1	AAC84795	Human TLR4 gene ex
50		20	0.5	20	1	AAC84824	Forward primer der
51		20	0.5	20	1	AAC84780	Human TLR4 gene ex
52	c	20	0.5	20	1	AAC84815	Human TLR4 gene ex
53	c	20	0.5	20	1	AAC84816	Human TLR4 gene ex
54	c	20	0.5	20	1	AAC84819	Human TLR4 gene ex
55		20	0.5	20	1	AAC84794	Human TLR4 gene ex
56		20	0.5	20	1	AAC84797	Human TLR4 gene ex
57	c	20	0.5	20	1	AAC84809	Human TLR4 gene ex
58	c	20	0.5	20	1	AAC84811	Human TLR4 gene ex
59		20	0.5	20	1	AAC84788	Human TLR4 gene ex
60		20	0.5	20	1	AAC84793	Human TLR4 gene ex
61	c	20	0.5	20	1	AAC84817	Human TLR4 gene ex
62	c	20	0.5	20	1	AAC84814	Human TLR4 gene ex
63		20	0.5	20	1	AAC84772	Human TLR4 gene am
64		20	0.5	20	1	AAL41015	Anti-CD14 monoclon
65		20	0.5	20	1	ADB39124	Human toll-like re
66		20	0.5	20	1	ADF17208	Human toll-like re
67		20	0.5	20	1	ADI53114	Human Toll-like re
68	c	20	0.5	20	1	ACC83590	Human Toll-like re
69	c	20	0.5	20	1	ACC83594	Human Toll-like re
70	c	20	0.5	20	1	ACC83606	Human Toll-like re
71	c	20	0.5	20	1	ACC83611	Human Toll-like re
72	c	20	0.5	20	1	ACC83584	Human Toll-like re
73	c	20	0.5	20	1	ACC83583	Human Toll-like re
74	c	20	0.5	20	1	ACC83592	Human Toll-like re
75	c	20	0.5	20	1	ACC83605	Human Toll-like re
76	c	20	0.5	20	1	ACC83608	Human Toll-like re
77	c	20	0.5	20	1	ACC83609	Human Toll-like re
78	c	20	0.5	20	1	ACC83596	Human Toll-like re
79	c	20	0.5	20	1	ACC83603	Human Toll-like re
80	c	20	0.5	20	1	ACC83588	Human Toll-like re
81	c	20	0.5	20	1	ACC83597	Human Toll-like re
82	c	20	0.5	20	1	ACC83602	Human Toll-like re
83	c	20	0.5	20	1	ACC83604	Human Toll-like re
84	c	20	0.5	20	1	ACC83581	Human Toll-like re
85	c	20	0.5	20	1	ACC83589	Human Toll-like re
86	c	20	0.5	20	1	ACC83582	Human Toll-like re
87	c	20	0.5	20	1	ACC83593	Human Toll-like re
88	c	20	0.5	20	1	ACC83607	Human Toll-like re
89	c	20	0.5	20	1	ACC83610	Human Toll-like re
90	c	20	0.5	20	1	ACC83613	Human Toll-like re
91	c	20	0.5	20	1	ACC83585	Human Toll-like re
92	c	20	0.5	20	1	ACC83598	Human Toll-like re
93	c	20	0.5	20	1	ACC83586	Human Toll-like re
94	c	20	0.5	20	1	ACC83587	Human Toll-like re
95	c	20	0.5	20	1	ACC83591	Human Toll-like re
96	c	20	0.5	20	1	ACC83595	Human Toll-like re
97	c	20	0.5	20	1	ACC83612	Human Toll-like re
98	c	19.2	0.5	24	1	AAI69670	Hepatitis E virus
99		19	0.5	19	1	AAC84782	Human TLR4 gene ex
100	c	19	0.5	19	1	ADB39125	Human toll-like re
101	c	19	0.5	19	1	ADI53115	Human Toll-like re
102	c	18.8	0.5	24	1	ACC74142	Reverse primer for
103	c	18.4	0.5	20	1	ADF17210	Human toll-like re
104	c	18.2	0.5	24	1	ADP98293	C. albicans specif
105		18	0.5	18	1	AAC84790	Human TLR4 gene ex
106	c	17.4	0.5	22	1	AAV51439	Zea mays genome fo

c 107	17.2	0.5	22	1	ABK88343	Synthetic TLR4 PCR
c 108	17.2	0.5	22	1	ADG17647	Mouse toll-like re
c 109	17	0.4	20	1	AAX21943	Human B-raf kinase
c 110	17	0.4	20	1	AAD44802	Human B-raf kinase
c 111	17	0.4	20	1	ADF09796	Human b-raf kinase
c 112	17	0.4	20	1	ACD42185	Antisense oligonuc
c 113	16.8	0.4	20	1	AAV37060	PCR primer for ant
114	16.8	0.4	20	1	ACC74158	Forward primer TLR
115	16.8	0.4	20	1	ADD93829	Mouse AF06972 (mAF
c 116	16.8	0.4	20	1	ABZ87635	Human oligonucleot
c 117	16.8	0.4	20	1	ABD23865	Human myosin X-der
118	16.8	0.4	20	1	ADH66468	Human glucocortico
119	16.8	0.4	20	1	ADH66115	Human glucocortico
c 120	16.8	0.4	20	1	ADH67804	Human glucocortico
121	16.8	0.4	21	1	AAZ25870	Human polymorphic
122	16.4	0.4	20	1	AAV80034	Primer intU2 for S
c 123	16.4	0.4	20	1	ABT13876	Human helicase-moi
c 124	16.4	0.4	20	1	ADN60081	Human helicase-moi
125	16.4	0.4	20	1	ADH65626	Human glucocortico
126	16.4	0.4	20	1	ADH67258	Human glucocortico
127	16.4	0.4	20	1	ADO55876	Human NIMA-related
c 128	16.4	0.4	20	1	ADO55815	Human NIMA-related
129	16.4	0.4	21	1	ADN14299	PCR primer used to
130	16.2	0.4	21	1	AAT10575	Cbeta-specific pri
c 131	16.2	0.4	21	1	AAV08680	Primer ATP/17FB fo
c 132	16.2	0.4	21	1	AAA95550	TCR Valpha 2 subfa
c 133	16.2	0.4	21	1	AAA38308	Human AT1 regulato
c 134	16.2	0.4	21	1	AAC61308	Human ACE, AGT and
135	16.2	0.4	21	1	AAF60173	Human ATM gene exo
136	16.2	0.4	21	1	ABA05093	Dipeptide aminopep
c 137	16.2	0.4	21	1	ADK00166	Murine pmn sequenc
138	16	0.4	19	1	ADE27067	Stearoyl-CoA desat
c 139	16	0.4	19	1	ADE27357	Stearoyl-CoA desat
c 140	16	0.4	20	1	AAT77163	Batten disease gen
c 141	16	0.4	20	1	ABS65155	Mouse casein kinas
142	15.8	0.4	19	1	AAX09330	Human biallelic po
143	15.8	0.4	19	1	ACC70795	Human Toll-like re
144	15.8	0.4	19	1	ADE78588	Endogenous caroten
c 145	15.8	0.4	19	1	ADF75738	Antisense siNA tha
146	15.8	0.4	19	1	ADF75553	Sense siNA that do
c 147	15.8	0.4	19	1	ADG34714	Human TNF siNA oli
148	15.8	0.4	19	1	ADG34802	Human TNF siNA oli
c 149	15.8	0.4	19	1	ADR78541	Human apolipoprote
c 150	15.8	0.4	19	1	ADR75923	Human apolipoprote
151	15.8	0.4	20	1	AAX59720	Modified oligonucl
c 152	15.8	0.4	20	1	AAV52722	DCoH (PCBD) gene e
c 153	15.8	0.4	20	1	AAV48008	Human B7-1 targett
c 154	15.8	0.4	20	1	AAZ37657	Human mdm2 phospho
155	15.8	0.4	20	1	AAX36672	PCR primer for mar
156	15.8	0.4	20	1	AAA41139	Human TNFalpha ant
c 157	15.8	0.4	20	1	AAF32850	Human B7-1 mRNA an
c 158	15.8	0.4	20	1	AAF80811	Human mdm2 phospho
c 159	15.8	0.4	20	1	AAS29426	Human mdm2 antisen
c 160	15.8	0.4	20	1	ABN79736	Human Fas target o
161	15.8	0.4	20	1	ACD05367	Tumour necrosis fa
c 162	15.8	0.4	20	1	ADD21622	Human mdm2 antisen
c 163	15.8	0.4	20	1	ADE27785	Human B7-1 mRNA ta
164	15.8	0.4	20	1	ABZ85958	Human oligonucleot
165	15.8	0.4	20	1	ABZ90805	Human oligonucleot
166	15.8	0.4	20	1	ABZ93212	Human oligonucleot
c 167	15.8	0.4	20	1	ABZ98920	Human PDE4A oligon
168	15.8	0.4	20	1	ABZ97844	Human eotaxin olig
c 169	15.8	0.4	20	1	ABZ83897	Toxicologically re
c 170	15.8	0.4	20	1	ACF03393	M. gallisepticum m
c 171	15.8	0.4	20	1	ADJ81464	Plant retroelement
172	15.8	0.4	20	1	ABD27035	H93087-derived oli
c 173	15.8	0.4	20	1	ABD31951	Human PDE4A-derive
174	15.8	0.4	20	1	ABD22188	Human stanniocalci
175	15.8	0.4	20	1	ABD30875	Human eotaxin-deri
176	15.8	0.4	20	1	ABD29442	H87536-derived oli
177	15.8	0.4	20	1	ADH70402	Human Vbeta gene r
c 178	15.8	0.4	20	1	ADH67733	Human glucocortico
179	15.8	0.4	20	1	ADH65935	Human glucocortico
c 180	15.8	0.4	20	1	ADH67703	Human glucocortico
c 181	15.8	0.4	20	1	ADI79725	Human HMG-CoA redu
182	15.8	0.4	20	1	ADI79528	Human HMG-CoA redu
c 183	15.8	0.4	20	1	ADJ60803	Oligonucleotide as
184	15.8	0.4	20	1	ADJ59719	Oligonucleotide as
c 185	15.8	0.4	20	1	ADJ54227	Human B7-1 DNA ant
c 186	15.8	0.4	20	1	ADL23352	Primer #2 for iden
c 187	15.8	0.4	20	1	ADL27792	Human Fas cDNA, an
c 188	15.8	0.4	20	1	ADM53564	Human Fas antisens
189	15.8	0.4	20	1	ADO45209	Human oligonucleot
c 190	15.8	0.4	20	1	ADO46292	Human oligonucleot
191	15.8	0.4	20	1	ADO51802	Human ADAM15 targe
c 192	15.8	0.4	20	1	ADO51767	Human ADAM15 antis
c 193	15.8	0.4	20	1	ADN30059	Human cytokine-ind
194	15.8	0.4	20	1	ADP11285	Set 1 right PCR pr
195	15.8	0.4	20	1	ADQ88907	Breast cancer asso
196	15.8	0.4	20	1	ADQ29449	Human TNF alpha an
197	15.8	0.4	20	1	ADR02965	Antisense oligonuc
c 198	15.8	0.4	21	1	AAZ11675	Oligo specific for
c 199	15.8	0.4	21	1	AAV72092	Mouse MSP PCR prim
200	15.8	0.4	21	1	AAS22336	Human COL9A2 PCR p
c 201	15.8	0.4	21	1	ADH49192	NOV72 PCR primer,
c 202	15.6	0.4	20	1	AAQ90158	Pollen allergen ge
203	15.4	0.4	17	1	AAT81553	Human c-myb hammer
204	15.4	0.4	17	1	AAC70462	Single nucleotide
205	15.4	0.4	17	1	AAC70489	Single nucleotide
206	15.4	0.4	17	1	ACN03131	WNV Inozyme substr
c 207	15.4	0.4	17	1	ACN09948	WNV minus strand I
c 208	15.4	0.4	17	1	ABT35599	Tumour suppression
209	15.4	0.4	17	1	ACD54465	HBV DNAzyme substr
210	15.4	0.4	17	1	ACD51886	HBV inozyme substr
211	15.4	0.4	17	1	ADM58685	Hepatitis B virus
212	15.4	0.4	17	1	ADM59738	Hepatitis B virus
c 213	15.4	0.4	18	1	AAT56721	Human TNF-alpha ha
214	15.4	0.4	18	1	AAT61999	Probe 3 for Auxis
215	15.4	0.4	18	1	AAS11810	Human surfactant p
c 216	15.4	0.4	18	1	AAS11808	Human surfactant p
c 217	15.4	0.4	18	1	ABL95898	Probe d for assayi
218	15.4	0.4	18	1	ADG73198	Pseudomonas syring
219	15.4	0.4	18	1	ADL12254	Pseudomonas syring
c 220	15.4	0.4	19	1	ABA97625	Probe d. Unidenti
c 221	15.4	0.4	20	1	AAQ41846	CHO C2 and C2' com
222	15.4	0.4	20	1	AAZ03406	PCR primer used to
223	15.4	0.4	20	1	AAA40987	Human TNFalpha ant
c 224	15.4	0.4	20	1	AAA10948	Primer #2 for coll
225	15.4	0.4	20	1	AAD17705	V. parahaemolyticu
c 226	15.4	0.4	20	1	ABQ78421	Oligonucleotide co
227	15.4	0.4	20	1	ACD05215	Tumour necrosis fa
c 228	15.4	0.4	20	1	ADF60910	Human collagen Ial
c 229	15.4	0.4	20	1	ABZ87410	Human oligonucleot
c 230	15.4	0.4	20	1	ABD23640	Human myosin X-der
231	15.4	0.4	20	1	ADH65191	Human glucocortico
c 232	15.4	0.4	20	1	ADH67561	Human glucocortico
c 233	15.4	0.4	20	1	ADH67618	Human glucocortico
234	15.4	0.4	20	1	ADK95516	Primer of the inve
235	15.4	0.4	20	1	ADN06176	Human SPS2 specifi
c 236	15.4	0.4	20	1	ADP88421	Human telomerase a
237	15.4	0.4	20	1	ADP68897	Human DRAK2 antise
238	15.4	0.4	20	1	ADQ29297	Human TNF alpha an
239	15.4	0.4	20	1	ADR02813	Antisense oligonuc
240	15.4	0.4	20	1	ADR67866	Prostaglandin E2 E
c 241	15.2	0.4	20	1	AAQ21516	Mutant primer for
c 242	15.2	0.4	20	1	AAQ53908	Primer for prepari
243	15.2	0.4	20	1	AAQ71950	Human IL-2R gamma
244	15.2	0.4	20	1	AAQ95706	Primer A (Group 7,
c 245	15.2	0.4	20	1	AAT47265	5' fragment #2 of
246	15.2	0.4	20	1	AAT89739	PCR primer used fo
247	15.2	0.4	20	1	AAV59158	p53 sense primer.
c 248	15.2	0.4	20	1	AAZ02662	PCR primer used to
c 249	15.2	0.4	20	1	AAX92717	PCR primer used to
c 250	15.2	0.4	20	1	AAA61979	Human MEKK5 phosph
251	15.2	0.4	20	1	AAF32931	Human B7-1 antisen
c 252	15.2	0.4	20	1	AAF33171	Human B7-1 antisen

253	15.2	0.4	20	1	AAP60191	Human ATM gene exo
c 254	15.2	0.4	20	1	AAC92601	Human nucleolin ph
c 255	15.2	0.4	20	1	ABK99798	Mouse RAIDD antise
256	15.2	0.4	20	1	ABX14629	Human lipoprotein
c 257	15.2	0.4	20	1	ABT11882	Autonomously stero
258	15.2	0.4	20	1	ABI95123	Capture oligonucle
c 259	15.2	0.4	20	1	ACF33763	Human CREB phospho
260	15.2	0.4	20	1	ADB99938	Vitamin D nuclear
261	15.2	0.4	20	1	ADB90006	Antinsense oligonu
c 262	15.2	0.4	20	1	ADC83901	Human papillomavir
c 263	15.2	0.4	20	1	ADC84033	Human papillomavir
264	15.2	0.4	20	1	ADE27866	Human B7-1 targete
c 265	15.2	0.4	20	1	ADE27991	Human B7-1 targete
c 266	15.2	0.4	20	1	ADF43774	HPV 33 detecting p
c 267	15.2	0.4	20	1	ADF43935	HPV 52 detecting p
c 268	15.2	0.4	20	1	ADF88065	Single nucleotide
c 269	15.2	0.4	20	1	ABZ94003	Human oligonucleot
c 270	15.2	0.4	20	1	ABZ86103	Human oligonucleot
c 271	15.2	0.4	20	1	ABZ89062	Human oligonucleot
c 272	15.2	0.4	20	1	ABZ91585	Human oligonucleot
c 273	15.2	0.4	20	1	ABZ91732	Human oligonucleot
c 274	15.2	0.4	20	1	ABZ91733	Human oligonucleot
c 275	15.2	0.4	20	1	ABZ98040	Human MCP4 oligonu
276	15.2	0.4	20	1	ABZ98571	Human ICAM oligonu
c 277	15.2	0.4	20	1	AAD52229	Human IFNGR1 antis
c 278	15.2	0.4	20	1	ADA26894	Human PRL-3 revers
279	15.2	0.4	20	1	ADL16109	Human lipoprotein
c 280	15.2	0.4	20	1	ABD27815	AA102454-derived o
c 281	15.2	0.4	20	1	ABD22333	Human cathepsin C-
c 282	15.2	0.4	20	1	ABD31071	Human MCP4-derived
283	15.2	0.4	20	1	ABD31602	Human ICAM-derived
c 284	15.2	0.4	20	1	ABD30233	AA284245-derived o
c 285	15.2	0.4	20	1	ABD27963	AA497002-derived o
c 286	15.2	0.4	20	1	ABD25292	AI092429-derived o
c 287	15.2	0.4	20	1	ABD27962	AA497002-derived o
c 288	15.2	0.4	20	1	ADG72071	Human SREBP-1 anti
289	15.2	0.4	20	1	ADG72205	Human SREBP-1 targ
c 290	15.2	0.4	20	1	ADH67543	Human glucocortico
c 291	15.2	0.4	20	1	ADH67827	Human glucocortico
c 292	15.2	0.4	20	1	ADH50655	Human IRAK-1 DNA,
293	15.2	0.4	20	1	ADH50721	Human IRAK-1 DNA t
c 294	15.2	0.4	20	1	ADI27028	Cyclin dependent k
295	15.2	0.4	20	1	ADI26888	Cyclin dependent k
c 296	15.2	0.4	20	1	ADJ34054	Human polo-like ki
297	15.2	0.4	20	1	ADJ33995	Human polo-like ki
c 298	15.2	0.4	20	1	ADJ46575	Human requiem anti
299	15.2	0.4	20	1	ADJ61423	Oligonucleotide as
c 300	15.2	0.4	20	1	ADJ59907	Oligonucleotide as
301	15.2	0.4	20	1	ADJ60421	Oligonucleotide as
302	15.2	0.4	20	1	ADJ38722	Human resistin ant
303	15.2	0.4	20	1	ADJ54308	Human B7-1 DNA ant
c 304	15.2	0.4	20	1	ADJ54433	Human B7-1 DNA ant
305	15.2	0.4	20	1	ADK12305	Mouse complement c
c 306	15.2	0.4	20	1	ADJ24260	Human endothelial
307	15.2	0.4	20	1	ADJ21649	Human endothelial
c 308	15.2	0.4	20	1	ADJ24576	Human endothelial
c 309	15.2	0.4	20	1	ADK79428	Chimeric phosphoro
310	15.2	0.4	20	1	ADK78831	Chimeric phosphoro
311	15.2	0.4	20	1	ADK73906	Chimeric phosphoro
312	15.2	0.4	20	1	ADK77560	Chimeric phosphoro
313	15.2	0.4	20	1	ADK81604	Chimeric phosphoro
314	15.2	0.4	20	1	ADK76828	Chimeric phosphoro
315	15.2	0.4	20	1	ADK73795	Chimeric phosphoro
316	15.2	0.4	20	1	ADK74411	Chimeric phosphoro
317	15.2	0.4	20	1	ADK19046	Immunostimulatory
c 318	15.2	0.4	20	1	ADO45397	Human oligonucleot
319	15.2	0.4	20	1	ADO45910	Human oligonucleot
320	15.2	0.4	20	1	ADO46813	Human oligonucleot
c 321	15.2	0.4	20	1	ADN30046	Human cytokine-ind
322	15.2	0.4	20	1	ADN30116	Human cytokine-ind
c 323	15.2	0.4	20	1	ADP31773	Oestrogen-responsi
324	15.2	0.4	20	1	ADP31848	Oestrogen-responsi
325	15.2	0.4	20	1	ADP49542	Human BAF53 antise
c 326	15.2	0.4	20	1	ADP49620	Human BAF53 antise
327	15.2	0.4	20	1	ADP49161	Human nicotinic re
c 328	15.2	0.4	20	1	ADP84370	5' donor site at t
329	15.2	0.4	20	1	ADK22657	Acyl-coenzyme A sy
c 330	15.2	0.4	20	1	ADS12549	PCR primer E2F use
331	15.2	0.4	20	1	ADS12558	PCR primer E2R use
332	15.2	0.4	20	1	ADT00671	Novel mutant prote
c 333	15.2	0.4	20	1	ADT01064	Novel mutant prote
334	15	0.4	17	1	AAV36994	Nucleotide sequenc
335	15	0.4	17	1	AAV41419	Nucleotide sequenc
c 336	15	0.4	17	1	AAF04657	Hammerhead ribozym
c 337	15	0.4	17	1	AAF04209	Hammerhead ribozym
c 338	15	0.4	17	1	ABK03219	Human CD20 Inozyme
c 339	15	0.4	17	1	ABK03220	Human CD20 Inozyme
c 340	15	0.4	17	1	ABK02853	Human CD20 Hammerh
c 341	15	0.4	20	1	AAX21944	Human B-raf kinase
342	15	0.4	20	1	ABT13950	Human helicase-moi
c 343	15	0.4	20	1	AAD44803	Human B-raf kinase
c 344	15	0.4	20	1	ADF09797	Human b-raf kinase
c 345	15	0.4	20	1	ABZ86360	Human oligonucleot
c 346	15	0.4	20	1	ABZ86408	Human oligonucleot
c 347	15	0.4	20	1	ACD42186	Antisense oligonuc
348	15	0.4	20	1	ADN60155	Human helicase-moi
c 349	15	0.4	20	1	ABD22590	Human cathepsin C-
c 350	15	0.4	20	1	ABD22638	Human myosin X-der
c 351	15	0.4	20	1	ADI66983	Human DEXRAS1 DNA
352	15	0.4	20	1	ADI66926	Human DEXRAS1 DNA

ALIGNMENTS

RESULT 1
ABZ02491
ID ABZ02491 standard; DNA; 50 BP.
XX
AC ABZ02491;
XX
DT 09-JAN-2003 (first entry)
XX
DE Human leukocyte gene expression profiling probe SEQ ID NO 2482.
XX
KW T7; leukocyte; gene expression profiling; allograft rejection;
KW atherosclerosis; congestive heart failure; systemic lupus erythematosus;
KW rheumatoid arthritis; osteoarthritis; cytomegalovirus; infection; probe;
KW ss.
XX
OS Homo sapiens.
XX
PN WO200257414-A2.
XX
PD 25-JUL-2002.
XX
PF 22-OCT-2001; 2001WO-US047856.
XX
PR 20-OCT-2000; 2000US-0241994P.
PR 08-JUN-2001; 2001US-0296764P.
XX
PA (BIOC-) BIOCARDIA INC.
XX
PI Wohlgemuth J, Fry K, Matcuk G, Altman P, Prentice J, Phillips J;
PI Ly N, Woodward R, Quertermous T, Johnson F;
XX
DR WPI; 2002-636525/68.
XX
PT New system for leukocyte expression profiling, diagnosing a disease, or
PT monitoring (the rate of) progression of a disease, e.g. atherosclerosis
PT or congestive heart failure, comprises diagnostic oligonucleotides.
XX
PS Claim 1; Page 406; 0pp; English.
XX
CC The invention relates to a system for detecting gene expression, which
CC comprises one or two isolated DNA molecules that detect expression of a

CC gene, where the gene corresponds to any of 8143 oligonucleotides
CC (ABZ00010-ABZ08152) each having 50 base pairs (bp). The system is useful
CC for leukocyte expression profiling. It is particularly useful for
CC diagnosing a disease, monitoring (rate of) progression of a disease,
CC predicting therapeutic outcome, determining prognosis for a patient,
CC predicting disease complications in an individual or monitoring response
CC to treatment in an individual. The diseases include cardiac allograft
CC rejection, kidney allograft rejection, liver allograft rejection,
CC atherosclerosis, congestive heart failure, systemic lupus erythematosus,
CC rheumatoid arthritis, osteoarthritis or cytomegalovirus infection
XX
SQ Sequence 50 BP; 13 A; 6 C; 16 G; 15 T; 0 U; 0 Other;

Query Match 1.3%; Score 50; DB 1; Length 50;
Best Local Similarity 100.0%; Pred. No. 0.15;
Matches 50; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 3724 TGATGTTTGATGGACCTATGAATCTATTTAGGGAGACACAGATGGCTGGG 3773
||||||||||||||||||||||||||||||||||||||||||||||||||
Db 1 TGATGTTTGATGGACCTATGAATCTATTTAGGGAGACACAGATGGCTGGG 50

RESULT 2
AAC84833/c
ID AAC84833 standard; DNA; 30 BP.
XX
AC AAC84833;
XX
DT 20-APR-2001 (first entry)
XX
DE 399Reverse primer for RFLP assay of human TLR4 gene.
XX
KW TLR4; toll receptor 4; innate immunity; gram-negative bacteria; sepsis;
KW respiratory distress syndrome; LPS; lipopolysaccharide; asthma; ARDS;
KW chronic airway disease; arthritis; inflammatory disease; SIRS; human;
KW systematic inflammatory response syndrome; pyelonephritis; bronchitis;
KW acute respiratory distress syndrome; gall bladder disease; pneumonia;
KW cystic fibrosis; antibacterial; antiinflammatory; PCR primer; RFLP; ss.
XX
OS Homo sapiens.
XX
PN WO200077204-A1.
XX
PD 21-DEC-2000.
XX
PF 08-JUN-2000; 2000WO-US015723.
XX
PR 10-JUN-1999; 99US-00329515.
XX
PA (IOWA) UNIV IOWA RES FOUND.
PA (LORE/) LORENZ E.
XX
PI Lorenz E, Schwartz DA, Schutte BC;
XX
DR WPI; 2001-061872/07.
XX
PT Identifying humans at risk of, or having indication associated with
PT altered innate immunity involves detecting or determining whether DNA
PT amplified from a biological sample encodes a portion of variant toll
PT receptor 4.
XX
PS Example 2; Page 42; 97pp; English.
XX
CC The invention relates to human toll receptor 4 (TLR4) nucleic acid and
CC methods to identify polymorphisms at the human TLR4 locus and to identify
CC individuals at risk of, or having, an indication associated with altered
CC innate immunity. A variant TLR4 nucleic acid is useful as a diagnostic
CC reagent for detecting a polymorphism in human TLR4 gene. Since the
CC presence of TLR4 mutation is associated with gram-negative sepsis,
CC severity of sepsis, pre-term delivery and respiratory distress syndrome
CC in pre-term infants, agents which alter TLR4 activity are useful for
CC preventing or ameliorating infection by gram-negative bacteria, sepsis
CC induced by gram-negative bacteria, LPS (lipopolysaccharide) induced
CC chronic airway disease, asthma, arthritis, local and systemic
CC inflammatory disease conditions such as systematic inflammatory response
CC syndrome (SIRS) or acute respiratory distress syndrome (ARDS),
CC pyelonephritis, gall bladder disease, pneumonia, bronchitis, chronic
CC obstructive pulmonary disease, local gram-negative bacterial infection
CC and cystic fibrosis. The present sequence represents a reverse primer
CC used to detect a nucleotide change at codon 399 of the human TLR4 gene,
CC used in a PCR based RFLP assay to genotype patients for TLR4
XX
SQ Sequence 30 BP; 10 A; 4 C; 9 G; 7 T; 0 U; 0 Other;

Query Match 0.8%; Score 30; DB 1; Length 30;
Best Local Similarity 100.0%; Pred. No. 12;
Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1706 AGCATTTAACTCACTCTCCAGTCTTCAGGT 1735
||||||||||||||||||||||||||||||
Db 30 AGCATTTAACTCACTCTCCAGTCTTCAGGT 1

RESULT 3
AAD46775/c
ID AAD46775 standard; DNA; 30 BP.
XX
AC AAD46775;
XX
DT 27-JAN-2003 (first entry)
XX
DE Human TLR4 (Toll-like receptor) DNA specific RT-PCR primer #2.
XX
KW Human; TLR; Toll-like receptor; dendritic cell associated protein;
KW autoimmune disorder; psoriasis; inflammatory bowel disease; asthma;
KW multiple sclerosis; lupus erythematosus; rheumatoid arthritis; cancer;
KW type I diabetes; infectious disease; gene therapy; immunosuppressive;
KW antiinflammatory; neuroprotective; dermatological; antibacterial;
KW virucide; cytostatic; reverse transcription; RT; PCR; primer; ss.
XX
OS Homo sapiens.
XX
PN WO200274921-A2.
XX
PD 26-SEP-2002.
XX
PF 19-MAR-2002; 2002WO-US008122.
XX
PR 19-MAR-2001; 2001US-0276474P.
XX
PA (CELL-) CELLULAR GENOMICS INC.
XX
PI Velleca MA, Mellman I;
XX
DR WPI; 2002-759890/82.
XX
PT Isolating dendritic cell associated protein using an agent which alters
PT its expression or activity, useful in diagnosing and treating disorders
PT with altered expression or activity of the protein, such as autoimmune
PT disease and cancer.
XX
PS Example 9; Page 56; 73pp; English.
XX
CC The invention relates to a method for generating a dendritic cell
CC associated protein. The invention also relates to compositions and
CC methods for generating an antibody against a dendritic cell associated
CC protein. The methods and compositions are useful for diagnosing and
CC treating diseases associated with altered dendritic cell activity such as
CC autoimmune disorders, e.g. psoriasis, inflammatory bowel disease, asthma,
CC multiple sclerosis, lupus erythematosus, rheumatoid arthritis or type I
CC diabetes, and cancer or infectious disease. The invention is also used in
CC gene therapy. The present sequence is a RT (reverse transcription)-PCR
CC primer used for amplifying human TLR (Toll-like receptor) DNA. This
CC sequence is used to illustrate the method of the invention
XX
SQ Sequence 30 BP; 9 A; 8 C; 10 G; 3 T; 0 U; 0 Other;

```
  Query Match             0.8%;  Score 30;  DB 1;  Length 30;
  Best Local Similarity   100.0%;  Pred. No. 12;
  Matches   30;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2701 CCTCCTGAGGCATTTCTTGCCCAGCTGGGT 2730
              ||||||||||||||||||||||||||||||
Db         30 CCTCCTGAGGCATTTCTTGCCCAGCTGGGT 1
```

RESULT 4
AAC84832
ID AAC84832 standard; DNA; 31 BP.
XX
AC AAC84832;
XX
DT 20-APR-2001 (first entry)
XX
DE 399Forward primer for RFLP assay of human TLR4 gene.
XX
KW TLR4; toll receptor 4; innate immunity; gram-negative bacteria; sepsis;
KW respiratory distress syndrome; LPS; lipopolysaccharide; asthma; ARDS;
KW chronic airway disease; arthritis; inflammatory disease; SIRS; human;
KW systematic inflammatory response syndrome; pyelonephritis; bronchitis;
KW acute respiratory distress syndrome; gall bladder disease; pneumonia;
KW cystic fibrosis; antibacterial; antiinflammatory; PCR primer; RFLP; ss.
XX
OS Homo sapiens.
XX
PN WO200077204-A1.
XX
PD 21-DEC-2000.
XX
PF 08-JUN-2000; 2000WO-US015723.
XX
PR 10-JUN-1999; 99US-00329515.
XX
PA (IOWA) UNIV IOWA RES FOUND.
PA (LORE/) LORENZ E.
XX
PI Lorenz E, Schwartz DA, Schutte BC;
XX
DR WPI; 2001-061872/07.
XX
PT Identifying humans at risk of, or having indication associated with
PT altered innate immunity involves detecting or determining whether DNA
PT amplified from a biological sample encodes a portion of variant toll
PT receptor 4.
XX
PS Claim 35; Page 42; 97pp; English.
XX
CC The invention relates to human toll receptor 4 (TLR4) nucleic acid and
CC methods to identify polymorphisms at the human TLR4 locus and to identify
CC individuals at risk of, or having, an indication associated with altered
CC innate immunity. A variant TLR4 nucleic acid is useful as a diagnostic
CC reagent for detecting a polymorphism in human TLR4 gene. Since the
CC presence of TLR4 mutation is associated with gram-negative sepsis,
CC severity of sepsis, pre-term delivery and respiratory distress syndrome
CC in pre-term infants, agents which alter TLR4 activity are useful for
CC preventing or ameliorating infection by gram-negative bacteria, sepsis
CC induced by gram-negative bacteria, LPS (lipopolysaccharide) induced
CC chronic airway disease, asthma, arthritis, local and systemic
CC inflammatory disease conditions such as systematic inflammatory response
CC syndrome (SIRS) or acute respiratory distress syndrome (ARDS),
CC pyelonephritis, gall bladder disease, pneumonia, bronchitis, chronic
CC obstructive pulmonary disease, local gram-negative bacterial infection
CC and cystic fibrosis. The present sequence represents a forward primer
CC used to detect a nucleotide change at codon 399 of the human TLR4 gene,
CC used in a PCR based RFLP assay to genotype patients for TLR4
XX
SQ Sequence 31 BP; 7 A; 3 C; 10 G; 11 T; 0 U; 0 Other;

```
  Query Match             0.8%;  Score 29.4;  DB 1;  Length 31;
  Best Local Similarity   96.8%;  Pred. No. 14;
  Matches   30;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1329 GGTTGCTGTTCTCAAAGTGATTTTGGGACAA 1359
              |||||||||||||||||||||||||||||| ||
Db          1 GGTTGCTGTTCTCAAAGTGATTTTGGGAGAA 31
```

RESULT 5
AAC84830
ID AAC84830 standard; DNA; 30 BP.
XX
AC AAC84830;
XX
DT 20-APR-2001 (first entry)
XX
DE 299Forward primer for RFLP assay of human TLR4 gene.
XX
KW TLR4; toll receptor 4; innate immunity; gram-negative bacteria; sepsis;
KW respiratory distress syndrome; LPS; lipopolysaccharide; asthma; ARDS;
KW chronic airway disease; arthritis; inflammatory disease; SIRS; human;
KW systematic inflammatory response syndrome; pyelonephritis; bronchitis;
KW acute respiratory distress syndrome; gall bladder disease; pneumonia;
KW cystic fibrosis; antibacterial; antiinflammatory; PCR primer; RFLP; ss.
XX
OS Homo sapiens.
XX
PN WO200077204-A1.
XX
PD 21-DEC-2000.
XX
PF 08-JUN-2000; 2000WO-US015723.
XX
PR 10-JUN-1999; 99US-00329515.
XX
PA (IOWA) UNIV IOWA RES FOUND.
PA (LORE/) LORENZ E.
XX
PI Lorenz E, Schwartz DA, Schutte BC;
XX
DR WPI; 2001-061872/07.
XX
PT Identifying humans at risk of, or having indication associated with
PT altered innate immunity involves detecting or determining whether DNA
PT amplified from a biological sample encodes a portion of variant toll
PT receptor 4.
XX
PS Claim 33; Page 42; 97pp; English.
XX
CC The invention relates to human toll receptor 4 (TLR4) nucleic acid and
CC methods to identify polymorphisms at the human TLR4 locus and to identify
CC individuals at risk of, or having, an indication associated with altered
CC innate immunity. A variant TLR4 nucleic acid is useful as a diagnostic
CC reagent for detecting a polymorphism in human TLR4 gene. Since the
CC presence of TLR4 mutation is associated with gram-negative sepsis,
CC severity of sepsis, pre-term delivery and respiratory distress syndrome
CC in pre-term infants, agents which alter TLR4 activity are useful for
CC preventing or ameliorating infection by gram-negative bacteria, sepsis
CC induced by gram-negative bacteria, LPS (lipopolysaccharide) induced
CC chronic airway disease, asthma, arthritis, local and systemic
CC inflammatory disease conditions such as systematic inflammatory response
CC syndrome (SIRS) or acute respiratory distress syndrome (ARDS),
CC pyelonephritis, gall bladder disease, pneumonia, bronchitis, chronic
CC obstructive pulmonary disease, local gram-negative bacterial infection
CC and cystic fibrosis. The present sequence represents a forward primer
CC used to detect a nucleotide change at codon 299 of the human TLR4 gene,
CC used in a PCR based RFLP assay to genotype patients for TLR4
XX
SQ Sequence 30 BP; 9 A; 8 C; 4 G; 9 T; 0 U; 0 Other;

```
  Query Match             0.7%;  Score 28.4;  DB 1;  Length 30;
  Best Local Similarity   96.7%;  Pred. No. 18;
  Matches   29;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;
```

```
Qy       1030 GATTAGCATACTTAGACTACTACCTCGATG 1059
             ||||||||||||||||||||||||||| |||
Db          1 GATTAGCATACTTAGACTACTACCTCCATG 30
```

RESULT 6
AAC84831/c
ID AAC84831 standard; DNA; 27 BP.
XX
AC AAC84831;
XX
DT 20-APR-2001 (first entry)
XX
DE 299Reverse primer for RFLP assay of human TLR4 gene.
XX
KW TLR4; toll receptor 4; innate immunity; gram-negative bacteria; sepsis;
KW respiratory distress syndrome; LPS; lipopolysaccharide; asthma; ARDS;
KW chronic airway disease; arthritis; inflammatory disease; SIRS; human;
KW systematic inflammatory response syndrome; pyelonephritis; bronchitis;
KW acute respiratory distress syndrome; gall bladder disease; pneumonia;
KW cystic fibrosis; antibacterial; antiinflammatory; PCR primer; RFLP; ss.
XX
OS Homo sapiens.
XX
PN WO200077204-A1.
XX
PD 21-DEC-2000.
XX
PF 08-JUN-2000; 2000WO-US015723.
XX
PR 10-JUN-1999; 99US-00329515.
XX
PA (IOWA) UNIV IOWA RES FOUND.
PA (LORE/) LORENZ E.
XX
PI Lorenz E, Schwartz DA, Schutte BC;
XX
DR WPI; 2001-061872/07.
XX
PT Identifying humans at risk of, or having indication associated with
PT altered innate immunity involves detecting or determining whether DNA
PT amplified from a biological sample encodes a portion of variant toll
PT receptor 4.
XX
PS Example 2; Page 42; 97pp; English.
XX
CC The invention relates to human toll receptor 4 (TLR4) nucleic acid and
CC methods to identify polymorphisms at the human TLR4 locus and to identify
CC individuals at risk of, or having, an indication associated with altered
CC innate immunity. A variant TLR4 nucleic acid is useful as a diagnostic
CC reagent for detecting a polymorphism in human TLR4 gene. Since the
CC presence of TLR4 mutation is associated with gram-negative sepsis,
CC severity of sepsis, pre-term delivery and respiratory distress syndrome
CC in pre-term infants, agents which alter TLR4 activity are useful for
CC preventing or ameliorating infection by gram-negative bacteria, sepsis
CC induced by gram-negative bacteria, LPS (lipopolysaccharide) induced
CC chronic airway disease, asthma, arthritis, local and systemic
CC inflammatory disease conditions such as systematic inflammatory response
CC syndrome (SIRS) or acute respiratory distress syndrome (ARDS),
CC pyelonephritis, gall bladder disease, pneumonia, bronchitis, chronic
CC obstructive pulmonary disease, local gram-negative bacterial infection
CC and cystic fibrosis. The present sequence represents a reverse primer
CC used to detect a nucleotide change at codon 299 of the human TLR4 gene,
CC used in a PCR based RFLP assay to genotype patients for TLR4
XX
SQ Sequence 27 BP; 10 A; 8 C; 3 G; 6 T; 0 U; 0 Other;

```
  Query Match             0.7%;  Score 27;  DB 1;  Length 27;
  Best Local Similarity   100.0%;  Pred. No. 21;
  Matches   27;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1252 GTGGGAATGCTTTTTCAGAAGTTGATC 1278
             ||||||||||||||||||||||||||||
Db         27 GTGGGAATGCTTTTTCAGAAGTTGATC 1
```

RESULT 7
AAC84807/c
ID AAC84807 standard; DNA; 26 BP.
XX
AC AAC84807;
XX
DT 20-APR-2001 (first entry)
XX
DE Human TLR4 gene exon 4 amplifying reverse primer.
XX
KW TLR4; toll receptor 4; innate immunity; gram-negative bacteria; sepsis;
KW respiratory distress syndrome; LPS; lipopolysaccharide; asthma; ARDS;
KW chronic airway disease; arthritis; inflammatory disease; SIRS; human;
KW systematic inflammatory response syndrome; pyelonephritis; bronchitis;
KW acute respiratory distress syndrome; gall bladder disease; pneumonia;
KW cystic fibrosis; antibacterial; antiinflammatory; PCR primer; ss.
XX
OS Homo sapiens.
XX
PN WO200077204-A1.
XX
PD 21-DEC-2000.
XX
PF 08-JUN-2000; 2000WO-US015723.
XX
PR 10-JUN-1999; 99US-00329515.
XX
PA (IOWA) UNIV IOWA RES FOUND.
PA (LORE/) LORENZ E.
XX
PI Lorenz E, Schwartz DA, Schutte BC;
XX
DR WPI; 2001-061872/07.
XX
PT Identifying humans at risk of, or having indication associated with
PT altered innate immunity involves detecting or determining whether DNA
PT amplified from a biological sample encodes a portion of variant toll
PT receptor 4.
XX
PS Example 1; Page 31; 97pp; English.
XX
CC The invention relates to human toll receptor 4 (TLR4) nucleic acid and
CC methods to identify polymorphisms at the human TLR4 locus and to identify
CC individuals at risk of, or having, an indication associated with altered
CC innate immunity. A variant TLR4 nucleic acid is useful as a diagnostic
CC reagent for detecting a polymorphism in human TLR4 gene. Since the
CC presence of TLR4 mutation is associated with gram-negative sepsis,
CC severity of sepsis, pre-term delivery and respiratory distress syndrome
CC in pre-term infants, agents which alter TLR4 activity are useful for
CC preventing or ameliorating infection by gram-negative bacteria, sepsis
CC induced by gram-negative bacteria, LPS (lipopolysaccharide) induced
CC chronic airway disease, asthma, arthritis, local and systemic
CC inflammatory disease conditions such as systematic inflammatory response
CC syndrome (SIRS) or acute respiratory distress syndrome (ARDS),
CC pyelonephritis, gall bladder disease, pneumonia, bronchitis, chronic
CC obstructive pulmonary disease, local gram-negative bacterial infection
CC and cystic fibrosis. Sequences AAC84776-823 represent PCR primers for
CC amplifying the exons of human TLR4 gene
XX
SQ Sequence 26 BP; 8 A; 6 C; 2 G; 10 T; 0 U; 0 Other;

```
  Query Match             0.7%;  Score 26;  DB 1;  Length 26;
  Best Local Similarity   100.0%;  Pred. No. 25;
  Matches   26;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1117 TGACTATTGAAAGGGTAAAAGACTTT 1142
              ||||||||||||||||||||||||||
Db         26 TGACTATTGAAAGGGTAAAAGACTTT 1
```

RESULT 8
AAI71236/c
ID AAI71236 standard; DNA; 24 BP.
XX
AC AAI71236;
XX
DT 23-JAN-2002 (first entry)
XX
DE Human Toll like receptor 4 PCR antisense primer 1 SEQ ID NO:9.
XX
KW Human; Toll like receptor; TLR; CD14; antibody; anti-CD14 antibody;
KW TLR/CD14 binding inhibitor; antibacterial; immunosuppressive;
KW antipyretic; hypertensive; immunostimulant; haemostatic; vasotropic;
KW bacterial infection; sepsis; fever; hypotension; leukopaenia;
KW thrombopaenia; shock; multi-organ failure; ss.
XX
OS Homo sapiens.
XX
PN WO200172993-A1.
XX
PD 04-OCT-2001.
XX
PF 02-APR-2001; 2001WO-JP002869.
XX
PR 31-MAR-2000; 2000JP-00099617.
PR 22-NOV-2000; 2000JP-00356719.
PR 28-MAR-2001; 2001US-00806158.
XX
PA (MOCH) MOCHIDA PHARM CO LTD.
XX
PI Furusako S, Mori S, Shirakawa K, Takahashi T;
XX
DR WPI; 2001-616487/71.
XX
PT Anti-CD14 antibody or its fragment inhibiting the binding of CD14 to Toll
PT -like receptor, applicable in drugs for treating bacterial infection as
PT well as sepsis, fever, hypotension, leukopenia, thrombopenia and shock.
XX
PS Example 2; Page 170; 202pp; Japanese.
XX
CC The present invention describes an anti-CD14 antibody, which has a
CC function of inhibiting the binding of CD14 to the Toll-like receptor
CC (TLR). The anti-CD14 antibody can specifically recognise the epitope
CC containing the domain from numbers 269-315 in human CD14 of the sequence
CC in AAG68127 or a part of it. Anti-CD14 antibody has antibacterial,
CC immunosuppressive, antipyretic, hypertensive, immunostimulant,
CC haemostatic and vasotropic activities. The antibody together with other
CC polypeptides are applicable in drugs for treating bacterial infection as
CC well as sepsis, fever, hypotension, leukopaenia, thrombopaenia, shock and
CC multi-organ failure. AAG68127 to AAG68137 and AAI71230 to AAI71295
CC represent sequences used in the exemplification of the present invention
XX
SQ Sequence 24 BP; 11 A; 5 C; 3 G; 5 T; 0 U; 0 Other;

Query Match 0.6%; Score 24; DB 1; Length 24;
Best Local Similarity 100.0%; Pred. No. 37;
Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1137 GACTTTTCTTATAATTTCGGATGG 1160
||||||||||||||||||||||||
Db 24 GACTTTTCTTATAATTTCGGATGG 1

RESULT 9
AAC84805/c
ID AAC84805 standard; DNA; 24 BP.
XX
AC AAC84805;
XX
DT 20-APR-2001 (first entry)
XX
DE Human TLR4 gene exon 4 amplifying reverse primer.
XX
KW TLR4; toll receptor 4; innate immunity; gram-negative bacteria; sepsis;
KW respiratory distress syndrome; LPS; lipopolysaccharide; asthma; ARDS;
KW chronic airway disease; arthritis; inflammatory disease; SIRS; human;
KW systematic inflammatory response syndrome; pyelonephritis; bronchitis;
KW acute respiratory distress syndrome; gall bladder disease; pneumonia;
KW cystic fibrosis; antibacterial; antiinflammatory; PCR primer; ss.
XX
OS Homo sapiens.
XX
PN WO200077204-A1.
XX
PD 21-DEC-2000.
XX
PF 08-JUN-2000; 2000WO-US015723.
XX
PR 10-JUN-1999; 99US-00329515.
XX
PA (IOWA) UNIV IOWA RES FOUND.
PA (LORE/) LORENZ E.
XX
PI Lorenz E, Schwartz DA, Schutte BC;
XX
DR WPI; 2001-061872/07.
XX
PT Identifying humans at risk of, or having indication associated with
PT altered innate immunity involves detecting or determining whether DNA
PT amplified from a biological sample encodes a portion of variant toll
PT receptor 4.
XX
PS Example 1; Page 31; 97pp; English.
XX
CC The invention relates to human toll receptor 4 (TLR4) nucleic acid and
CC methods to identify polymorphisms at the human TLR4 locus and to identify
CC individuals at risk of, or having, an indication associated with altered
CC innate immunity. A variant TLR4 nucleic acid is useful as a diagnostic
CC reagent for detecting a polymorphism in human TLR4 gene. Since the
CC presence of TLR4 mutation is associated with gram-negative sepsis,
CC severity of sepsis, pre-term delivery and respiratory distress syndrome
CC in pre-term infants, agents which alter TLR4 activity are useful for
CC preventing or ameliorating infection by gram-negative bacteria, sepsis
CC induced by gram-negative bacteria, LPS (lipopolysaccharide) induced
CC chronic airway disease, asthma, arthritis, local and systemic
CC inflammatory disease conditions such as systematic inflammatory response
CC syndrome (SIRS) or acute respiratory distress syndrome (ARDS),
CC pyelonephritis, gall bladder disease, pneumonia, bronchitis, chronic
CC obstructive pulmonary disease, local gram-negative bacterial infection
CC and cystic fibrosis. Sequences AAC84776-823 represent PCR primers for
CC amplifying the exons of human TLR4 gene
XX
SQ Sequence 24 BP; 6 A; 5 C; 4 G; 9 T; 0 U; 0 Other;

Query Match 0.6%; Score 24; DB 1; Length 24;
Best Local Similarity 100.0%; Pred. No. 37;
Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 836 AGAAATTAGGCTTCATAAGCTGAC 859
||||||||||||||||||||||||
Db 24 AGAAATTAGGCTTCATAAGCTGAC 1

RESULT 10
AAC84810/c
ID AAC84810 standard; DNA; 24 BP.
XX
AC AAC84810;
XX
DT 20-APR-2001 (first entry)
XX
DE Human TLR4 gene exon 4 amplifying reverse primer.
XX
KW TLR4; toll receptor 4; innate immunity; gram-negative bacteria; sepsis;
KW respiratory distress syndrome; LPS; lipopolysaccharide; asthma; ARDS;

KW chronic airway disease; arthritis; inflammatory disease; SIRS; human;
KW systematic inflammatory response syndrome; pyelonephritis; bronchitis;
KW acute respiratory distress syndrome; gall bladder disease; pneumonia;
KW cystic fibrosis; antibacterial; antiinflammatory; PCR primer; ss.
XX
OS Homo sapiens.
XX
PN WO200077204-A1.
XX
PD 21-DEC-2000.
XX
PF 08-JUN-2000; 2000WO-US015723.
XX
PR 10-JUN-1999; 99US-00329515.
XX
PA (IOWA) UNIV IOWA RES FOUND.
PA (LORE/) LORENZ E.
XX
PI Lorenz E, Schwartz DA, Schutte BC;
XX
DR WPI; 2001-061872/07.
XX
PT Identifying humans at risk of, or having indication associated with
PT altered innate immunity involves detecting or determining whether DNA
PT amplified from a biological sample encodes a portion of variant toll
PT receptor 4.
XX
PS Example 1; Page 31; 97pp; English.
XX
CC The invention relates to human toll receptor 4 (TLR4) nucleic acid and
CC methods to identify polymorphisms at the human TLR4 locus and to identify
CC individuals at risk of, or having, an indication associated with altered
CC innate immunity. A variant TLR4 nucleic acid is useful as a diagnostic
CC reagent for detecting a polymorphism in human TLR4 gene. Since the
CC presence of TLR4 mutation is associated with gram-negative sepsis,
CC severity of sepsis, pre-term delivery and respiratory distress syndrome
CC in pre-term infants, agents which alter TLR4 activity are useful for
CC preventing or ameliorating infection by gram-negative bacteria, sepsis
CC induced by gram-negative bacteria, LPS (lipopolysaccharide) induced
CC chronic airway disease, asthma, arthritis, local and systemic
CC inflammatory disease conditions such as systematic inflammatory response
CC syndrome (SIRS) or acute respiratory distress syndrome (ARDS),
CC pyelonephritis, gall bladder disease, pneumonia, bronchitis, chronic
CC obstructive pulmonary disease, local gram-negative bacterial infection
CC and cystic fibrosis. Sequences AAC84776-823 represent PCR primers for
CC amplifying the exons of human TLR4 gene
XX
SQ Sequence 24 BP; 8 A; 5 C; 2 G; 9 T; 0 U; 0 Other;

Query Match 0.6%; Score 24; DB 1; Length 24;
Best Local Similarity 100.0%; Pred. No. 37;
Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
Qy       1464 TTGAAACAAATGAGTGAGTTTTCA 1487
              ||||||||||||||||||||||||
Db         24 TTGAAACAAATGAGTGAGTTTTCA 1
```

RESULT 11
AAD46774
ID AAD46774 standard; DNA; 24 BP.
XX
AC AAD46774;
XX
DT 27-JAN-2003 (first entry)
XX
DE Human TLR4 (Toll-like receptor) DNA specific RT-PCR primer #1.
XX
KW Human; TLR; Toll-like receptor; dendritic cell associated protein;
KW autoimmune disorder; psoriasis; inflammatory bowel disease; asthma;
KW multiple sclerosis; lupus erythematosus; rheumatoid arthritis; cancer;
KW type I diabetes; infectious disease; gene therapy; immunosuppressive;
KW antiinflammatory; neuroprotective; dermatological; antibacterial;
KW virucide; cytostatic; reverse transcription; RT; PCR; primer; ss.
XX
OS Homo sapiens.
XX
PN WO200274921-A2.
XX
PD 26-SEP-2002.
XX
PF 19-MAR-2002; 2002WO-US008122.
XX
PR 19-MAR-2001; 2001US-0276474P.
XX
PA (CELL-) CELLULAR GENOMICS INC.
XX
PI Velleca MA, Mellman I;
XX
DR WPI; 2002-759890/82.
XX
PT Isolating dendritic cell associated protein using an agent which alters
PT its expression or activity, useful in diagnosing and treating disorders
PT with altered expression or activity of the protein, such as autoimmune
PT disease and cancer.
XX
PS Example 9; Page 56; 73pp; English.
XX
CC The invention relates to a method for generating a dendritic cell
CC associated protein. The invention also relates to compositions and
CC methods for generating an antibody against a dendritic cell associated
CC protein. The methods and compositions are useful for diagnosing and
CC treating diseases associated with altered dendritic cell activity such as
CC autoimmune disorders, e.g. psoriasis, inflammatory bowel disease, asthma,
CC multiple sclerosis, lupus erythematosus, rheumatoid arthritis or type I
CC diabetes, and cancer or infectious disease. The invention is also used in
CC gene therapy. The present sequence is a RT (reverse transcription)-PCR
CC primer used for amplifying human TLR (Toll-like receptor) DNA. This
CC sequence is used to illustrate the method of the invention
XX
SQ Sequence 24 BP; 4 A; 6 C; 7 G; 7 T; 0 U; 0 Other;

Query Match 0.6%; Score 24; DB 1; Length 24;
Best Local Similarity 100.0%; Pred. No. 37;
Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
Qy       2442 CTGAGCAGTCGTGCTGGTATCATC 2465
              ||||||||||||||||||||||||
Db          1 CTGAGCAGTCGTGCTGGTATCATC 24
```

RESULT 12
AAL41014/c
ID AAL41014 standard; DNA; 24 BP.
XX
AC AAL41014;
XX
DT 11-OCT-2002 (first entry)
XX
DE Anti-CD14 monoclonal antibody related oligonucleotide #2.
XX
KW Immunosuppressive; antibacterial; anti-CD14 antibody; epitope; sepsis;
KW human CD14; ds.
XX
OS Unidentified.
XX
PN WO200242333-A1.
XX
PD 30-MAY-2002.
XX
PF 28-SEP-2001; 2001WO-JP008563.
XX
PR 22-NOV-2000; 2000JP-00356719.
XX
PA (MOCH) MOCHIDA PHARM CO LTD.
XX

PI Furusako S, Shirakawa K, Mori S;
XX
DR WPI; 2002-454920/48.
XX
PT Anti-CD14 monoclonal antibody which inhibits CD14/T lymphocyte receptor
PT binding by specifically recognizing epitope in human CD14 domain to
PT prevent interaction and suppress cell activation, useful for treating
PT sepsis.
XX
PS Example 2; Page 45; 156pp; Japanese.
XX
CC The invention relates to an anti-CD14 antibody which can specifically
CC recognise an epitope containing a part of a domain with not less than 8
CC amino acids in human CD14 in the region from positions 269-315 in a fully
CC defined sequence of 356 amino acids as given in the specification. The
CC antibody is useful in drug compositions for treating sepsis and for
CC screening remedies for sepsis. This polynucleotide sequence represents
CC anti-CD14 related oligonucleotide of the invention
XX
SQ Sequence 24 BP; 11 A; 5 C; 3 G; 5 T; 0 U; 0 Other;

Query Match 0.6%; Score 24; DB 1; Length 24;
Best Local Similarity 100.0%; Pred. No. 37;
Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1137 GACTTTTCTTATAATTTCGGATGG 1160
||||||||||||||||||||||||
Db 24 GACTTTTCTTATAATTTCGGATGG 1

RESULT 13
ACC43816
ID ACC43816 standard; DNA; 24 BP.
XX
AC ACC43816;
XX
DT 11-AUG-2003 (first entry)
XX
DE Sense PCR primer for human toll-like receptor 4 (TLR4) cDNA.
XX
KW Toll-like receptor; TLR; central nervous system; CNS;
KW neurodegenerative disorder; Alzheimer's disease; Parkinson's disease;
KW Pick's disease; multiple sclerosis; stroke; PCR; primer; ss.
XX
OS Homo sapiens.
XX
PN EP1288226-A1.
XX
PD 05-MAR-2003.
XX
PF 03-SEP-2001; 2001EP-00203325.
XX
PR 03-SEP-2001; 2001EP-00203325.
XX
PA (NEDE) NEDERLANDSE ORG TOEGEPAST.
XX
PI Van Noort JM;
XX
DR WPI; 2003-344752/33.
XX
PT Modifying the expression of Toll-like receptors (TLR), useful for
PT influencing neurodegeneration or neuroprotection in the human CNS,
PT comprises contacting CNS cells with a TLR-expression modifying agent,
PT e.g. alpha B-crystallin.
XX
PS Disclosure; Page 7; 20pp; English.
XX
CC The specification describes a method of modifying the expression of at a
CC toll-like receptor (TLR) in cells of the human central nervous system
CC (CNS). The method comprises contacting the cells with a TLR-expression
CC modifying agent, selected from substances that are endogenous to the
CC human CNS and its parts or variants, that is capable of altering the
CC expression of a TLR in the cells. The TLR-expression modifying agent is
CC useful for preparing a pharmaceutical composition for retarding or
CC inhibiting a neurodegenerative process and/or stimulating a
CC neuroprotective process in a human being afflicted by a neurodegenerative
CC disorder such as Alzheimer's disease, Parkinson's disease, Pick's
CC disease, multiple sclerosis or stroke. The present PCR primer was used to
CC amplify cDNA encoding human TLR1. The primer was used to determine the
CC amount of TLR present in human glia cells in a semi-quantitative RT-PCR
XX
SQ Sequence 24 BP; 8 A; 2 C; 10 G; 4 T; 0 U; 0 Other;

Query Match 0.6%; Score 24; DB 1; Length 24;
Best Local Similarity 100.0%; Pred. No. 37;
Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2218 AGGACTGGGTAAGGAATGAGCTAG 2241
||||||||||||||||||||||||
Db 1 AGGACTGGGTAAGGAATGAGCTAG 24

RESULT 14
ADR83260
ID ADR83260 standard; RNA; 24 BP.
XX
AC ADR83260;
XX
DT 02-DEC-2004 (first entry)
XX
DE Human toll-like receptor 4 miRNA target region.
XX
KW human; ss; miRNA; microRNA; ontogenesis; cell therapy; cancer;
KW immune disease; nerve disorder; amyotrophic lateral sclerosis;
KW Parkinson's disease; Alzheimer's disease; inflammatory disease;
KW siRNA silencing precursor; cytostatic; immunosuppressive; nootropic;
KW neuroprotective; antiinflammatory; immunotherapy; toll-like receptor 4.
XX
OS Homo sapiens.
XX
PN WO2004076622-A2.
XX
PD 10-SEP-2004.
XX
PF 10-FEB-2004; 2004WO-JP001433.
XX
PR 10-FEB-2003; 2003US-0445829P.
XX
PA (NAAD-) NAT INST ADVANCED IND SCI & TECHNOLOGY.
XX
PI Taira K, Kawasaki H;
XX
DR WPI; 2004-653393/63.
XX
PT Modulating expression of a target gene in a cell, for treating cancer, an
PT immune disease, or a nerve disorder, comprises introducing into the cell
PT a polynucleotide that forms a duplex region with an mRNA transcribed from
PT the target gene.
XX
PS Claim 2; SEQ ID NO 162; 865pp; English.
XX
CC This invention relates to a novel method for modulating the expression of
CC a target gene in a cell. Specifically, it refers to the introduction into
CC a cell of a polynucleotide that forms a duplex region with an mRNA
CC transcribed from the target gene, where the duplex region comprises a
CC mammalian miRNA target region i.e. a non-coding microRNA (miRNA) that
CC regulates mRNA at a post-transcriptional level. The present invention
CC describes a method for controlling ontogenesis of a mammal, function of a
CC mammalian cell, differentiation of a mammalian cell or viability of a
CC mammalian cell in the post-transcriptional phase, which comprises
CC introducing a plasmid vector comprising a promoter and nucleic acid
CC molecule expressing an miRNA or siRNA silencing precursor to the miRNA.
CC Accordingly, it provides a cell therapy method for treating cancer,
CC immune disease, nerve disorder (e.g. amyotrophic lateral sclerosis,
CC Parkinson's disease, or Alzheimer's disease) or an inflammatory disease
CC by introducing into the cell the miRNA, siRNA silencing precursor to the

CC miRNA or the plasmid vector. As such, they can be developed into
CC pharmaceutical compositions that exhibit cytostatic, immunosuppressive,
CC nootropic, neuroprotective and antiinflammatory activities and hence can
CC be used for immunotherapy. This oligonucleotide sequence is a human miRNA
CC target region derived from a target gene of the invention.
XX
SQ Sequence 24 BP; 6 A; 7 C; 3 G; 0 T; 8 U; 0 Other;

Query Match 0.6%; Score 24; DB 1; Length 24;
Best Local Similarity 66.7%; Pred. No. 37;
Matches 16; Conservative 8; Mismatches 0; Indels 0; Gaps 0;

```
Qy       2278 TCTGCCTTCACTACAGAGACTTTA 2301
              :|:|||::|||:||||||||:::|
Db          1 UCUGCCUUCACUACAGAGACUUUA 24
```

RESULT 15
AAC84796
ID AAC84796 standard; DNA; 23 BP.
XX
AC AAC84796;
XX
DT 20-APR-2001 (first entry)
XX
DE Human TLR4 gene exon 4 amplifying forward primer.
XX
KW TLR4; toll receptor 4; innate immunity; gram-negative bacteria; sepsis;
KW respiratory distress syndrome; LPS; lipopolysaccharide; asthma; ARDS;
KW chronic airway disease; arthritis; inflammatory disease; SIRS; human;
KW systematic inflammatory response syndrome; pyelonephritis; bronchitis;
KW acute respiratory distress syndrome; gall bladder disease; pneumonia;
KW cystic fibrosis; antibacterial; antiinflammatory; PCR primer; ss.
XX
OS Homo sapiens.
XX
PN WO200077204-A1.
XX
PD 21-DEC-2000.
XX
PF 08-JUN-2000; 2000WO-US015723.
XX
PR 10-JUN-1999; 99US-00329515.
XX
PA (IOWA) UNIV IOWA RES FOUND.
PA (LORE/) LORENZ E.
XX
PI Lorenz E, Schwartz DA, Schutte BC;
XX
DR WPI; 2001-061872/07.
XX
PT Identifying humans at risk of, or having indication associated with
PT altered innate immunity involves detecting or determining whether DNA
PT amplified from a biological sample encodes a portion of variant toll
PT receptor 4.
XX
PS Example 1; Page 31; 97pp; English.
XX
CC The invention relates to human toll receptor 4 (TLR4) nucleic acid and
CC methods to identify polymorphisms at the human TLR4 locus and to identify
CC individuals at risk of, or having, an indication associated with altered
CC innate immunity. A variant TLR4 nucleic acid is useful as a diagnostic
CC reagent for detecting a polymorphism in human TLR4 gene. Since the
CC presence of TLR4 mutation is associated with gram-negative sepsis,
CC severity of sepsis, pre-term delivery and respiratory distress syndrome
CC in pre-term infants, agents which alter TLR4 activity are useful for
CC preventing or ameliorating infection by gram-negative bacteria, sepsis
CC induced by gram-negative bacteria, LPS (lipopolysaccharide) induced
CC chronic airway disease, asthma, arthritis, local and systemic
CC inflammatory disease conditions such as systematic inflammatory response
CC syndrome (SIRS) or acute respiratory distress syndrome (ARDS),
CC pyelonephritis, gall bladder disease, pneumonia, bronchitis, chronic
CC obstructive pulmonary disease, local gram-negative bacterial infection
CC and cystic fibrosis. Sequences AAC84776-823 represent PCR primers for
CC amplifying the exons of human TLR4 gene
XX
SQ Sequence 23 BP; 5 A; 6 C; 3 G; 9 T; 0 U; 0 Other;

Query Match 0.6%; Score 23; DB 1; Length 23;
Best Local Similarity 100.0%; Pred. No. 44;
Matches 23; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
Qy       2459 TATCATCTTCATTGTCCTGCAGA 2481
              |||||||||||||||||||||||
Db          1 TATCATCTTCATTGTCCTGCAGA 23
```

RESULT 16
AAC84783
ID AAC84783 standard; DNA; 23 BP.
XX
AC AAC84783;
XX
DT 20-APR-2001 (first entry)
XX
DE Human TLR4 gene exon 4 amplifying forward primer.
XX
KW TLR4; toll receptor 4; innate immunity; gram-negative bacteria; sepsis;
KW respiratory distress syndrome; LPS; lipopolysaccharide; asthma; ARDS;
KW chronic airway disease; arthritis; inflammatory disease; SIRS; human;
KW systematic inflammatory response syndrome; pyelonephritis; bronchitis;
KW acute respiratory distress syndrome; gall bladder disease; pneumonia;
KW cystic fibrosis; antibacterial; antiinflammatory; PCR primer; ss.
XX
OS Homo sapiens.
XX
PN WO200077204-A1.
XX
PD 21-DEC-2000.
XX
PF 08-JUN-2000; 2000WO-US015723.
XX
PR 10-JUN-1999; 99US-00329515.
XX
PA (IOWA) UNIV IOWA RES FOUND.
PA (LORE/) LORENZ E.
XX
PI Lorenz E, Schwartz DA, Schutte BC;
XX
DR WPI; 2001-061872/07.
XX
PT Identifying humans at risk of, or having indication associated with
PT altered innate immunity involves detecting or determining whether DNA
PT amplified from a biological sample encodes a portion of variant toll
PT receptor 4.
XX
PS Example 1; Page 31; 97pp; English.
XX
CC The invention relates to human toll receptor 4 (TLR4) nucleic acid and
CC methods to identify polymorphisms at the human TLR4 locus and to identify
CC individuals at risk of, or having, an indication associated with altered
CC innate immunity. A variant TLR4 nucleic acid is useful as a diagnostic
CC reagent for detecting a polymorphism in human TLR4 gene. Since the
CC presence of TLR4 mutation is associated with gram-negative sepsis,
CC severity of sepsis, pre-term delivery and respiratory distress syndrome
CC in pre-term infants, agents which alter TLR4 activity are useful for
CC preventing or ameliorating infection by gram-negative bacteria, sepsis
CC induced by gram-negative bacteria, LPS (lipopolysaccharide) induced
CC chronic airway disease, asthma, arthritis, local and systemic
CC inflammatory disease conditions such as systematic inflammatory response
CC syndrome (SIRS) or acute respiratory distress syndrome (ARDS),
CC pyelonephritis, gall bladder disease, pneumonia, bronchitis, chronic
CC obstructive pulmonary disease, local gram-negative bacterial infection
CC and cystic fibrosis. Sequences AAC84776-823 represent PCR primers for
CC amplifying the exons of human TLR4 gene
XX

```
SQ   Sequence 23 BP; 10 A; 0 C; 8 G; 5 T; 0 U; 0 Other;

  Query Match             0.6%;  Score 23;  DB 1;  Length 23;
  Best Local Similarity   100.0%;  Pred. No. 44;
  Matches   23;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        943 TGGGAGAATTTAGAAATGAAGGA 965
              |||||||||||||||||||||||
Db          1 TGGGAGAATTTAGAAATGAAGGA 23


RESULT 17
AAC84787
ID   AAC84787 standard; DNA; 23 BP.
XX
AC   AAC84787;
XX
DT   20-APR-2001  (first entry)
XX
DE   Human TLR4 gene exon 4 amplifying forward primer.
XX
KW   TLR4; toll receptor 4; innate immunity; gram-negative bacteria; sepsis;
KW   respiratory distress syndrome; LPS; lipopolysaccharide; asthma; ARDS;
KW   chronic airway disease; arthritis; inflammatory disease; SIRS; human;
KW   systematic inflammatory response syndrome; pyelonephritis; bronchitis;
KW   acute respiratory distress syndrome; gall bladder disease; pneumonia;
KW   cystic fibrosis; antibacterial; antiinflammatory; PCR primer; ss.
XX
OS   Homo sapiens.
XX
PN   WO200077204-A1.
XX
PD   21-DEC-2000.
XX
PF   08-JUN-2000; 2000WO-US015723.
XX
PR   10-JUN-1999;   99US-00329515.
XX
PA   (IOWA ) UNIV IOWA RES FOUND.
PA   (LORE/) LORENZ E.
XX
PI   Lorenz E,  Schwartz DA,  Schutte BC;
XX
DR   WPI; 2001-061872/07.
XX
PT   Identifying humans at risk of, or having indication associated with
PT   altered innate immunity involves detecting or determining whether DNA
PT   amplified from a biological sample encodes a portion of variant toll
PT   receptor 4.
XX
PS   Example 1; Page 31; 97pp; English.
XX
CC   The invention relates to human toll receptor 4 (TLR4) nucleic acid and
CC   methods to identify polymorphisms at the human TLR4 locus and to identify
CC   individuals at risk of, or having, an indication associated with altered
CC   innate immunity. A variant TLR4 nucleic acid is useful as a diagnostic
CC   reagent for detecting a polymorphism in human TLR4 gene. Since the
CC   presence of TLR4 mutation is associated with gram-negative sepsis,
CC   severity of sepsis, pre-term delivery and respiratory distress syndrome
CC   in pre-term infants, agents which alter TLR4 activity are useful for
CC   preventing or ameliorating infection by gram-negative bacteria, sepsis
CC   induced by gram-negative bacteria, LPS (lipopolysaccharide) induced
CC   chronic airway disease, asthma, arthritis, local and systemic
CC   inflammatory disease conditions such as systematic inflammatory response
CC   syndrome (SIRS) or acute respiratory distress syndrome (ARDS),
CC   pyelonephritis, gall bladder disease, pneumonia, bronchitis, chronic
CC   obstructive pulmonary disease, local gram-negative bacterial infection
CC   and cystic fibrosis. Sequences AAC84776-823 represent PCR primers for
CC   amplifying the exons of human TLR4 gene
XX
SQ   Sequence 23 BP; 7 A; 5 C; 4 G; 7 T; 0 U; 0 Other;

  Query Match             0.6%;  Score 23;  DB 1;  Length 23;
  Best Local Similarity   100.0%;  Pred. No. 44;
  Matches   23;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1410 TCAAACTTCTTGGGCTTAGAACA 1432
              |||||||||||||||||||||||
Db          1 TCAAACTTCTTGGGCTTAGAACA 23


RESULT 18
AAC84808/c
ID   AAC84808 standard; DNA; 23 BP.
XX
AC   AAC84808;
XX
DT   20-APR-2001  (first entry)
XX
DE   Human TLR4 gene exon 4 amplifying reverse primer.
XX
KW   TLR4; toll receptor 4; innate immunity; gram-negative bacteria; sepsis;
KW   respiratory distress syndrome; LPS; lipopolysaccharide; asthma; ARDS;
KW   chronic airway disease; arthritis; inflammatory disease; SIRS; human;
KW   systematic inflammatory response syndrome; pyelonephritis; bronchitis;
KW   acute respiratory distress syndrome; gall bladder disease; pneumonia;
KW   cystic fibrosis; antibacterial; antiinflammatory; PCR primer; ss.
XX
OS   Homo sapiens.
XX
PN   WO200077204-A1.
XX
PD   21-DEC-2000.
XX
PF   08-JUN-2000; 2000WO-US015723.
XX
PR   10-JUN-1999;   99US-00329515.
XX
PA   (IOWA ) UNIV IOWA RES FOUND.
PA   (LORE/) LORENZ E.
XX
PI   Lorenz E,  Schwartz DA,  Schutte BC;
XX
DR   WPI; 2001-061872/07.
XX
PT   Identifying humans at risk of, or having indication associated with
PT   altered innate immunity involves detecting or determining whether DNA
PT   amplified from a biological sample encodes a portion of variant toll
PT   receptor 4.
XX
PS   Example 1; Page 31; 97pp; English.
XX
CC   The invention relates to human toll receptor 4 (TLR4) nucleic acid and
CC   methods to identify polymorphisms at the human TLR4 locus and to identify
CC   individuals at risk of, or having, an indication associated with altered
CC   innate immunity. A variant TLR4 nucleic acid is useful as a diagnostic
CC   reagent for detecting a polymorphism in human TLR4 gene. Since the
CC   presence of TLR4 mutation is associated with gram-negative sepsis,
CC   severity of sepsis, pre-term delivery and respiratory distress syndrome
CC   in pre-term infants, agents which alter TLR4 activity are useful for
CC   preventing or ameliorating infection by gram-negative bacteria, sepsis
CC   induced by gram-negative bacteria, LPS (lipopolysaccharide) induced
CC   chronic airway disease, asthma, arthritis, local and systemic
CC   inflammatory disease conditions such as systematic inflammatory response
CC   syndrome (SIRS) or acute respiratory distress syndrome (ARDS),
CC   pyelonephritis, gall bladder disease, pneumonia, bronchitis, chronic
CC   obstructive pulmonary disease, local gram-negative bacterial infection
CC   and cystic fibrosis. Sequences AAC84776-823 represent PCR primers for
CC   amplifying the exons of human TLR4 gene
XX
SQ   Sequence 23 BP; 6 A; 1 C; 8 G; 8 T; 0 U; 0 Other;

  Query Match             0.6%;  Score 23;  DB 1;  Length 23;
  Best Local Similarity   100.0%;  Pred. No. 44;
  Matches   23;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;
```

```
Qy       1200 CCCACATTGAAACTCAAATCTCT 1222
              |||||||||||||||||||||||
Db         23 CCCACATTGAAACTCAAATCTCT 1
```

RESULT 19
ACC43826/c
ID ACC43826 standard; DNA; 24 BP.
XX
AC ACC43826;
XX
DT 11-AUG-2003 (first entry)
XX
DE Antisense PCR primer for human toll-like receptor 4 (TLR4) cDNA.
XX
KW Toll-like receptor; TLR; central nervous system; CNS;
KW neurodegenerative disorder; Alzheimer's disease; Parkinson's disease;
KW Pick's disease; multiple sclerosis; stroke; PCR; primer; ss.
XX
OS Homo sapiens.
XX
PN EP1288226-A1.
XX
PD 05-MAR-2003.
XX
PF 03-SEP-2001; 2001EP-00203325.
XX
PR 03-SEP-2001; 2001EP-00203325.
XX
PA (NEDE) NEDERLANDSE ORG TOEGEPAST.
XX
PI Van Noort JM;
XX
DR WPI; 2003-344752/33.
XX
PT Modifying the expression of Toll-like receptors (TLR), useful for
PT influencing neurodegeneration or neuroprotection in the human CNS,
PT comprises contacting CNS cells with a TLR-expression modifying agent,
PT e.g. alpha B-crystallin.
XX
PS Disclosure; Page 7; 20pp; English.
XX
CC The specification describes a method of modifying the expression of at a
CC toll-like receptor (TLR) in cells of the human central nervous system
CC (CNS). The method comprises contacting the cells with a TLR-expression
CC modifying agent, selected from substances that are endogenous to the
CC human CNS and its parts or variants, that is capable of altering the
CC expression of a TLR in the cells. The TLR-expression modifying agent is
CC useful for preparing a pharmaceutical composition for retarding or
CC inhibiting a neurodegenerative process and/or stimulating a
CC neuroprotective process in a human being afflicted by a neurodegenerative
CC disorder such as Alzheimer's disease, Parkinson's disease, Pick's
CC disease, multiple sclerosis or stroke. The present PCR primer was used to
CC amplify cDNA encoding human TLR1. The primer was used to determine the
CC amount of TLR present in human glia cells in a semi-quantitative RT-PCR
XX
SQ Sequence 24 BP; 3 A; 8 C; 5 G; 8 T; 0 U; 0 Other;

```
  Query Match             0.6%;  Score 22.4;  DB 1;  Length 24;
  Best Local Similarity   95.8%;  Pred. No. 55;
  Matches   23;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       2627 GAATCCAGAAGGAACAGTGGGTAC 2650
              |||||||||||| ||||||||||
Db         24 GAATCCAGAAGGACCAGTGGGTAC 1
```

RESULT 20
AAC84786
ID AAC84786 standard; DNA; 22 BP.
XX
AC AAC84786;
XX
DT 20-APR-2001 (first entry)
XX
DE Human TLR4 gene exon 4 amplifying forward primer.
XX
KW TLR4; toll receptor 4; innate immunity; gram-negative bacteria; sepsis;
KW respiratory distress syndrome; LPS; lipopolysaccharide; asthma; ARDS;
KW chronic airway disease; arthritis; inflammatory disease; SIRS; human;
KW systematic inflammatory response syndrome; pyelonephritis; bronchitis;
KW acute respiratory distress syndrome; gall bladder disease; pneumonia;
KW cystic fibrosis; antibacterial; antiinflammatory; PCR primer; ss.
XX
OS Homo sapiens.
XX
PN WO200077204-A1.
XX
PD 21-DEC-2000.
XX
PF 08-JUN-2000; 2000WO-US015723.
XX
PR 10-JUN-1999; 99US-00329515.
XX
PA (IOWA) UNIV IOWA RES FOUND.
PA (LORE/) LORENZ E.
XX
PI Lorenz E, Schwartz DA, Schutte BC;
XX
DR WPI; 2001-061872/07.
XX
PT Identifying humans at risk of, or having indication associated with
PT altered innate immunity involves detecting or determining whether DNA
PT amplified from a biological sample encodes a portion of variant toll
PT receptor 4.
XX
PS Example 1; Page 31; 97pp; English.
XX
CC The invention relates to human toll receptor 4 (TLR4) nucleic acid and
CC methods to identify polymorphisms at the human TLR4 locus and to identify
CC individuals at risk of, or having, an indication associated with altered
CC innate immunity. A variant TLR4 nucleic acid is useful as a diagnostic
CC reagent for detecting a polymorphism in human TLR4 gene. Since the
CC presence of TLR4 mutation is associated with gram-negative sepsis,
CC severity of sepsis, pre-term delivery and respiratory distress syndrome
CC in pre-term infants, agents which alter TLR4 activity are useful for
CC preventing or ameliorating infection by gram-negative bacteria, sepsis
CC induced by gram-negative bacteria, LPS (lipopolysaccharide) induced
CC chronic airway disease, asthma, arthritis, local and systemic
CC inflammatory disease conditions such as systematic inflammatory response
CC syndrome (SIRS) or acute respiratory distress syndrome (ARDS),
CC pyelonephritis, gall bladder disease, pneumonia, bronchitis, chronic
CC obstructive pulmonary disease, local gram-negative bacterial infection
CC and cystic fibrosis. Sequences AAC84776-823 represent PCR primers for
CC amplifying the exons of human TLR4 gene
XX
SQ Sequence 22 BP; 6 A; 4 C; 4 G; 8 T; 0 U; 0 Other;

```
  Query Match             0.6%;  Score 22;  DB 1;  Length 22;
  Best Local Similarity   100.0%;  Pred. No. 52;
  Matches   22;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1323 TTCAAAGGTTGCTGTTCTCAAA 1344
              ||||||||||||||||||||||
Db          1 TTCAAAGGTTGCTGTTCTCAAA 22
```

RESULT 21
AAC84806/c
ID AAC84806 standard; DNA; 22 BP.
XX
AC AAC84806;
XX
DT 20-APR-2001 (first entry)
XX
DE Human TLR4 gene exon 4 amplifying reverse primer.

XX
KW TLR4; toll receptor 4; innate immunity; gram-negative bacteria; sepsis;
KW respiratory distress syndrome; LPS; lipopolysaccharide; asthma; ARDS;
KW chronic airway disease; arthritis; inflammatory disease; SIRS; human;
KW systematic inflammatory response syndrome; pyelonephritis; bronchitis;
KW acute respiratory distress syndrome; gall bladder disease; pneumonia;
KW cystic fibrosis; antibacterial; antiinflammatory; PCR primer; ss.
XX
OS Homo sapiens.
XX
PN WO200077204-A1.
XX
PD 21-DEC-2000.
XX
PF 08-JUN-2000; 2000WO-US015723.
XX
PR 10-JUN-1999; 99US-00329515.
XX
PA (IOWA) UNIV IOWA RES FOUND.
PA (LORE/) LORENZ E.
XX
PI Lorenz E, Schwartz DA, Schutte BC;
XX
DR WPI; 2001-061872/07.
XX
PT Identifying humans at risk of, or having indication associated with
PT altered innate immunity involves detecting or determining whether DNA
PT amplified from a biological sample encodes a portion of variant toll
PT receptor 4.
XX
PS Example 1; Page 31; 97pp; English.
XX
CC The invention relates to human toll receptor 4 (TLR4) nucleic acid and
CC methods to identify polymorphisms at the human TLR4 locus and to identify
CC individuals at risk of, or having, an indication associated with altered
CC innate immunity. A variant TLR4 nucleic acid is useful as a diagnostic
CC reagent for detecting a polymorphism in human TLR4 gene. Since the
CC presence of TLR4 mutation is associated with gram-negative sepsis,
CC severity of sepsis, pre-term delivery and respiratory distress syndrome
CC in pre-term infants, agents which alter TLR4 activity are useful for
CC preventing or ameliorating infection by gram-negative bacteria, sepsis
CC induced by gram-negative bacteria, LPS (lipopolysaccharide) induced
CC chronic airway disease, asthma, arthritis, local and systemic
CC inflammatory disease conditions such as systematic inflammatory response
CC syndrome (SIRS) or acute respiratory distress syndrome (ARDS),
CC pyelonephritis, gall bladder disease, pneumonia, bronchitis, chronic
CC obstructive pulmonary disease, local gram-negative bacterial infection
CC and cystic fibrosis. Sequences AAC84776-823 represent PCR primers for
CC amplifying the exons of human TLR4 gene
XX
SQ Sequence 22 BP; 7 A; 7 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 0.6%; Score 22; DB 1; Length 22;
Best Local Similarity 100.0%; Pred. No. 52;
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 992 TCTAGAGGGCCTGTGCAATTTG 1013
||||||||||||||||||||||
Db 22 TCTAGAGGGCCTGTGCAATTTG 1

RESULT 22
AAX73769
ID AAX73769 standard; RNA; 27 BP.
XX
AC AAX73769;
XX
DT 28-JUL-1999 (first entry)
XX
DE Mouse flt-1 VEGF receptor hammerhead ribozyme #241.
XX
KW Vascular endothelial growth factor receptor; VEGF receptor; flt-1; flk-1;
KW KDR; hammerhead ribozyme; hairpin ribozyme; cleavage;
KW tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease;
KW fms-like tyrosine kinase 1; kinase insert domain containing receptor;
KW foetal liver kinase 1; ss.
XX
OS Synthetic.
OS Mus sp.
XX
PN WO9715662-A2.
XX
PD 01-MAY-1997.
XX
PF 25-OCT-1996; 96WO-US017480.
XX
PR 26-OCT-1995; 95US-0005974P.
PR 11-JAN-1996; 96US-00584040.
XX
PA (RIBO-) RIBOZYME PHARM INC.
PA (CHIR) CHIRON CORP.
XX
PI Pavco P, Mcswiggen J, Stinchcomb D, Escobedo J;
XX
DR WPI; 1997-259017/23.
XX
PT Nucleic acid molecule modulating VEGF receptor(s) gene expression or mRNA
PT stability - useful for treating e.g. tumour angiogenesis, psoriasis,
PT rheumatoid arthritis, etc., in a human patient.
XX
PS Claim 9; Page 162; 218pp; English.
XX
CC The present invention describes nucleic acid molecules which modulate the
CC synthesis, expression and/or stability of a mRNA encoding 1 or more
CC receptors of vascular endothelial growth factor (VEGF). A patient
CC (preferably human) having a condition associated with the level of the
CC fms-like tyrosine kinase 1 (flt-1), kinase insert domain containing
CC receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour
CC angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can be
CC treated by administering the nucleic acid molecule or the expression
CC vector to the patient. AAX67275 to AAX75752 represent specific examples
CC of nucleic acid molecules from the present invention
XX
SQ Sequence 27 BP; 12 A; 4 C; 4 G; 0 T; 6 U; 1 Other;

Query Match 0.6%; Score 21.2; DB 1; Length 27;
Best Local Similarity 66.7%; Pred. No. 91;
Matches 18; Conservative 5; Mismatches 4; Indels 0; Gaps 0;

Qy 2673 ACATCTATCTGAAGAGGAAAAATAAAA 2699
|||:|: :|:|| || |||| |:||||
Db 1 ACAUCUGUCUGAUGANGAAACAUAAAA 27

RESULT 23
AAX67583
ID AAX67583 standard; RNA; 27 BP.
XX
AC AAX67583;
XX
DT 28-JUL-1999 (first entry)
XX
DE Human flt1 VEGF receptor hammerhead ribozyme #309.
XX
KW Vascular endothelial growth factor receptor; VEGF receptor; flt-1; flk-1;
KW KDR; hammerhead ribozyme; hairpin ribozyme; cleavage;
KW tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease;
KW fms-like tyrosine kinase 1; kinase insert domain containing receptor;
KW foetal liver kinase 1; ss.
XX
OS Synthetic.
OS Homo sapiens.
XX
PN WO9715662-A2.
XX
PD 01-MAY-1997.

XX
PF 25-OCT-1996; 96WO-US017480.
XX
PR 26-OCT-1995; 95US-0005974P.
PR 11-JAN-1996; 96US-00584040.
XX
PA (RIBO-) RIBOZYME PHARM INC.
PA (CHIR) CHIRON CORP.
XX
PI Pavco P, Mcswiggen J, Stinchcomb D, Escobedo J;
XX
DR WPI; 1997-259017/23.
XX
PT Nucleic acid molecule modulating VEGF receptor(s) gene expression or mRNA
PT stability - useful for treating e.g. tumour angiogenesis, psoriasis,
PT rheumatoid arthritis, etc., in a human patient.
XX
PS Claim 9; Page 56; 218pp; English.
XX
CC The present invention describes nucleic acid molecules which modulate the
CC synthesis, expression and/or stability of a mRNA encoding 1 or more
CC receptors of vascular endothelial growth factor (VEGF). A patient
CC (preferably human) having a condition associated with the level of the
CC fms-like tyrosine kinase 1 (flt-1), kinase insert domain containing
CC receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour
CC angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can be
CC treated by administering the nucleic acid molecule or the expression
CC vector to the patient. AAX67275 to AAX75752 represent specific examples
CC of nucleic acid molecules from the present invention
XX
SQ Sequence 27 BP; 12 A; 3 C; 4 G; 0 T; 7 U; 1 Other;

Query Match 0.6%; Score 21.2; DB 1; Length 27;
Best Local Similarity 66.7%; Pred. No. 91;
Matches 18; Conservative 5; Mismatches 4; Indels 0; Gaps 0;

Qy 2673 ACATCTATCTGAAGAGGAAAAATAAAA 2699
||||:|: :|:|| || |||| |:||||
Db 1 ACAUCUGUCUGAUGANGAAAUAUAAAA 27

RESULT 24
AAC84784
ID AAC84784 standard; DNA; 21 BP.
XX
AC AAC84784;
XX
DT 20-APR-2001 (first entry)
XX
DE Human TLR4 gene exon 4 amplifying forward primer.
XX
KW TLR4; toll receptor 4; innate immunity; gram-negative bacteria; sepsis;
KW respiratory distress syndrome; LPS; lipopolysaccharide; asthma; ARDS;
KW chronic airway disease; arthritis; inflammatory disease; SIRS; human;
KW systematic inflammatory response syndrome; pyelonephritis; bronchitis;
KW acute respiratory distress syndrome; gall bladder disease; pneumonia;
KW cystic fibrosis; antibacterial; antiinflammatory; PCR primer; ss.
XX
OS Homo sapiens.
XX
PN WO200077204-A1.
XX
PD 21-DEC-2000.
XX
PF 08-JUN-2000; 2000WO-US015723.
XX
PR 10-JUN-1999; 99US-00329515.
XX
PA (IOWA) UNIV IOWA RES FOUND.
PA (LORE/) LORENZ E.
XX
PI Lorenz E, Schwartz DA, Schutte BC;
XX
DR WPI; 2001-061872/07.
XX
PT Identifying humans at risk of, or having indication associated with
PT altered innate immunity involves detecting or determining whether DNA
PT amplified from a biological sample encodes a portion of variant toll
PT receptor 4.
XX
PS Example 1; Page 31; 97pp; English.
XX
CC The invention relates to human toll receptor 4 (TLR4) nucleic acid and
CC methods to identify polymorphisms at the human TLR4 locus and to identify
CC individuals at risk of, or having, an indication associated with altered
CC innate immunity. A variant TLR4 nucleic acid is useful as a diagnostic
CC reagent for detecting a polymorphism in human TLR4 gene. Since the
CC presence of TLR4 mutation is associated with gram-negative sepsis,
CC severity of sepsis, pre-term delivery and respiratory distress syndrome
CC in pre-term infants, agents which alter TLR4 activity are useful for
CC preventing or ameliorating infection by gram-negative bacteria, sepsis
CC induced by gram-negative bacteria, LPS (lipopolysaccharide) induced
CC chronic airway disease, asthma, arthritis, local and systemic
CC inflammatory disease conditions such as systematic inflammatory response
CC syndrome (SIRS) or acute respiratory distress syndrome (ARDS),
CC pyelonephritis, gall bladder disease, pneumonia, bronchitis, chronic
CC obstructive pulmonary disease, local gram-negative bacterial infection
CC and cystic fibrosis. Sequences AAC84776-823 represent PCR primers for
CC amplifying the exons of human TLR4 gene
XX
SQ Sequence 21 BP; 2 A; 5 C; 3 G; 11 T; 0 U; 0 Other;

Query Match 0.6%; Score 21; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 62;
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1093 TTTCTTCATTTTCCCTGGTGA 1113
|||||||||||||||||||||
Db 1 TTTCTTCATTTTCCCTGGTGA 21

RESULT 25
AAC84803/c
ID AAC84803 standard; DNA; 21 BP.
XX
AC AAC84803;
XX
DT 20-APR-2001 (first entry)
XX
DE Human TLR4 gene exon 4 amplifying reverse primer.
XX
KW TLR4; toll receptor 4; innate immunity; gram-negative bacteria; sepsis;
KW respiratory distress syndrome; LPS; lipopolysaccharide; asthma; ARDS;
KW chronic airway disease; arthritis; inflammatory disease; SIRS; human;
KW systematic inflammatory response syndrome; pyelonephritis; bronchitis;
KW acute respiratory distress syndrome; gall bladder disease; pneumonia;
KW cystic fibrosis; antibacterial; antiinflammatory; PCR primer; ss.
XX
OS Homo sapiens.
XX
PN WO200077204-A1.
XX
PD 21-DEC-2000.
XX
PF 08-JUN-2000; 2000WO-US015723.
XX
PR 10-JUN-1999; 99US-00329515.
XX
PA (IOWA) UNIV IOWA RES FOUND.
PA (LORE/) LORENZ E.
XX
PI Lorenz E, Schwartz DA, Schutte BC;
XX
DR WPI; 2001-061872/07.
XX
PT Identifying humans at risk of, or having indication associated with

PT altered innate immunity involves detecting or determining whether DNA
PT amplified from a biological sample encodes a portion of variant toll
PT receptor 4.
XX
PS Example 1; Page 31; 97pp; English.
XX
CC The invention relates to human toll receptor 4 (TLR4) nucleic acid and
CC methods to identify polymorphisms at the human TLR4 locus and to identify
CC individuals at risk of, or having, an indication associated with altered
CC innate immunity. A variant TLR4 nucleic acid is useful as a diagnostic
CC reagent for detecting a polymorphism in human TLR4 gene. Since the
CC presence of TLR4 mutation is associated with gram-negative sepsis,
CC severity of sepsis, pre-term delivery and respiratory distress syndrome
CC in pre-term infants, agents which alter TLR4 activity are useful for
CC preventing or ameliorating infection by gram-negative bacteria, sepsis
CC induced by gram-negative bacteria, LPS (lipopolysaccharide) induced
CC chronic airway disease, asthma, arthritis, local and systemic
CC inflammatory disease conditions such as systematic inflammatory response
CC syndrome (SIRS) or acute respiratory distress syndrome (ARDS),
CC pyelonephritis, gall bladder disease, pneumonia, bronchitis, chronic
CC obstructive pulmonary disease, local gram-negative bacterial infection
CC and cystic fibrosis. Sequences AAC84776-823 represent PCR primers for
CC amplifying the exons of human TLR4 gene
XX
SQ Sequence 21 BP; 7 A; 4 C; 5 G; 5 T; 0 U; 0 Other;

Query Match 0.6%; Score 21; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 62;
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 524 AGCCTTTTCTGGACTATCAAG 544
||||||||||||||||||||
Db 21 AGCCTTTTCTGGACTATCAAG 1

RESULT 26
AAC84823/c
ID AAC84823 standard; DNA; 21 BP.
XX
AC AAC84823;
XX
DT 20-APR-2001 (first entry)
XX
DE Human TLR4 gene exon 4 amplifying reverse primer.
XX
KW TLR4; toll receptor 4; innate immunity; gram-negative bacteria; sepsis;
KW respiratory distress syndrome; LPS; lipopolysaccharide; asthma; ARDS;
KW chronic airway disease; arthritis; inflammatory disease; SIRS; human;
KW systematic inflammatory response syndrome; pyelonephritis; bronchitis;
KW acute respiratory distress syndrome; gall bladder disease; pneumonia;
KW cystic fibrosis; antibacterial; antiinflammatory; PCR primer; ss.
XX
OS Homo sapiens.
XX
PN WO200077204-A1.
XX
PD 21-DEC-2000.
XX
PF 08-JUN-2000; 2000WO-US015723.
XX
PR 10-JUN-1999; 99US-00329515.
XX
PA (IOWA) UNIV IOWA RES FOUND.
PA (LORE/) LORENZ E.
XX
PI Lorenz E, Schwartz DA, Schutte BC;
XX
DR WPI; 2001-061872/07.
XX
PT Identifying humans at risk of, or having indication associated with
PT altered innate immunity involves detecting or determining whether DNA
PT amplified from a biological sample encodes a portion of variant toll
PT receptor 4.
XX
PS Example 1; Page 31; 97pp; English.
XX
CC The invention relates to human toll receptor 4 (TLR4) nucleic acid and
CC methods to identify polymorphisms at the human TLR4 locus and to identify
CC individuals at risk of, or having, an indication associated with altered
CC innate immunity. A variant TLR4 nucleic acid is useful as a diagnostic
CC reagent for detecting a polymorphism in human TLR4 gene. Since the
CC presence of TLR4 mutation is associated with gram-negative sepsis,
CC severity of sepsis, pre-term delivery and respiratory distress syndrome
CC in pre-term infants, agents which alter TLR4 activity are useful for
CC preventing or ameliorating infection by gram-negative bacteria, sepsis
CC induced by gram-negative bacteria, LPS (lipopolysaccharide) induced
CC chronic airway disease, asthma, arthritis, local and systemic
CC inflammatory disease conditions such as systematic inflammatory response
CC syndrome (SIRS) or acute respiratory distress syndrome (ARDS),
CC pyelonephritis, gall bladder disease, pneumonia, bronchitis, chronic
CC obstructive pulmonary disease, local gram-negative bacterial infection
CC and cystic fibrosis. Sequences AAC84776-823 represent PCR primers for
CC amplifying the exons of human TLR4 gene
XX
SQ Sequence 21 BP; 5 A; 6 C; 4 G; 6 T; 0 U; 0 Other;

Query Match 0.6%; Score 21; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 62;
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2813 AGATATGCAGGGCTGCTAATC 2833
||||||||||||||||||||
Db 21 AGATATGCAGGGCTGCTAATC 1

RESULT 27
ACC70796/c
ID ACC70796 standard; DNA; 21 BP.
XX
AC ACC70796;
XX
DT 20-NOV-2003 (first entry)
XX
DE Human Toll-like receptor 4, Tlr-4, PCR primer #2.
XX
KW Human; PCR; primer; vulnerary; anti-tumour; antirheumatic; antiarthritic;
KW antiarteriosclerotic; cytostatic; neointima; scar; plaque; blood vessel;
KW Toll-like receptor 4; adventitial cell; Tlr-4; ss.
XX
OS Homo sapiens.
XX
PN EP1302206-A1.
XX
PD 16-APR-2003.
XX
PF 11-OCT-2001; 2001EP-00203846.
XX
PR 11-OCT-2001; 2001EP-00203846.
XX
PA (UYUT-) UNIV UTRECHT MEDISCH CENT.
PA (UYUT-) RIJKSUNIV UTRECHT.
XX
PI De Kleijn DPV, Pasterkamp G;
XX
DR WPI; 2003-484923/46.
XX
PT Interfering with the formation of a neointima/scar and/or a plaque in a
PT blood vessel, useful for modulating tumor growth, comprises providing a
PT ligand capable of modulating Toll-like receptor activity of adventitial
PT cells.
XX
PS Disclosure; Page 7; 23pp; English.
XX
CC The present invention relates to a method for interfering with the
CC formation of a neointima/scar and/or a plaque in a blood vessel by
CC providing a ligand capable of modulating Toll-like receptor activity of

CC adventitial cells. The method is useful for reducing the formation of a
CC neointima/scar and/or a plaque in a blood vessel after stenting,
CC angioplasty, heart transplantation, by pass surgery, arteriovenous
CC shunting and infection, especially bacterial infection. The method is
CC also useful for modulating tumour growth, and for modulating the effects
CC of rheumatoid arthritis. The present sequence is a PCR primer for human
CC Toll-like receptor 4 (Tlr-4)
XX
SQ Sequence 21 BP; 8 A; 9 C; 0 G; 4 T; 0 U; 0 Other;

Query Match 0.6%; Score 21; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 62;
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2356 GAAAGGTGATTGTTGTGGTGT 2376
||||||||||||||||||||||
Db 21 GAAAGGTGATTGTTGTGGTGT 1

RESULT 28
ADF17209/c
ID ADF17209 standard; DNA; 25 BP.
XX
AC ADF17209;
XX
DT 12-FEB-2004 (first entry)
XX
DE Human toll-like receptor 4 (TLR4) gene PCR primer #3.
XX
KW therapeutic agent; endothelial disorder; 3-amino-1;
KW 2-benzisothiazole compound; endothelial disorders; toxaemia;
KW severe toxaemia; toxic shock; haemorrhagic shock;
KW alcohol induced cirrhosis; adult respiratory distress syndrome;
KW chronic rheumatoid arthritis; ulcerative gastritis; Crohn's disease;
KW glomerulonephritis; infectious carditis; systemic lupus erythematosus;
KW scleroderma; Sjoegren's syndrome; multiple organ failure;
KW autoimmune disease; multiple sclerosis; PCR; primer; ss; human;
KW toll-like receptor 4; TLR4.
XX
OS Homo sapiens.
XX
PN WO2003087072-A1.
XX
PD 23-OCT-2003.
XX
PF 31-MAR-2003; 2003WO-JP004108.
XX
PR 29-MAR-2002; 2002JP-00132121.
XX
PA (MOCH) MOCHIDA PHARM CO LTD.
XX
PI Furusako S, Satoh T, Nakamura M, Mizuno M, Mori S;
XX
DR WPI; 2003-903121/82.
XX
PT Agents for treating diseases associated with endothelial disorders,
PT toxemia or toll like receptor signaling comprise new or known 3-amino-1,2
PT -benzisothiazole compounds.
XX
PS Example 4; SEQ ID NO 6; 180pp; Japanese.
XX
CC The invention comprises therapeutic agents for preventing or treating
CC diseases associated with endothelial disorders, the agents contain a 3-
CC amino-1,2-benzisothiazole compound. The therapeutic agents of the
CC invention are useful for preventing/treating: diseases associated with
CC endothelial disorders, toxaemia, severe toxaemia, toxic shock,
CC haemorrhagic shock, alcohol induced cirrhosis, adult respiratory distress
CC syndrome, chronic rheumatoid arthritis, ulcerative gastritis, Crohn's
CC disease, glomerulonephritis, infectious carditis, systemic lupus
CC erythematosus, scleroderma, Sjoegren's syndrome, multiple organ failure
CC or autoimmune diseases (e.g. multiple sclerosis). The present DNA
CC sequence represents a PCR primer that was used in the exemplification of
CC the invention.
XX
SQ Sequence 25 BP; 12 A; 5 C; 3 G; 5 T; 0 U; 0 Other;

Query Match 0.6%; Score 21; DB 1; Length 25;
Best Local Similarity 100.0%; Pred. No. 84;
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1140 TTTTCTTATAATTTCGGATGG 1160
||||||||||||||||||||
Db 21 TTTTCTTATAATTTCGGATGG 1

RESULT 29
ACC74143/c
ID ACC74143 standard; DNA; 25 BP.
XX
AC ACC74143;
XX
DT 11-JUL-2003 (first entry)
XX
DE Probe for detecting murine TLR4 expression.
XX
KW Mouse; immunomodulator; antibacterial; immunosuppressive; CSF-1;
KW colony stimulating factor-1; septic shock; TLR; toll-like receptor;
KW interleukin-12; IL-12; HPRT; hypoxanthine phosphoribosyl transferase;
KW probe; ss.
XX
OS Mus sp.
XX
PN WO2003028752-A1.
XX
PD 10-APR-2003.
XX
PF 03-OCT-2002; 2002WO-AU001348.
XX
PR 03-OCT-2001; 2001AU-00008071.
XX
PA (UYQU) UNIV QUEENSLAND.
XX
PI Hume DA, Sweet MJ, Stacey KJ, Sester DP;
XX
DR WPI; 2003-381587/36.
XX
PT Modulating an immune response in an animal, useful for the prophylactic
PT or therapeutic treatment of bacterially-induced septic shock, by
PT modulating colony stimulating factor-1 (CSF-1) activity in an animal.
XX
PS Example; Page 19; 58pp; English.
XX
CC The invention relates to modulating an immune response in an animal. The
CC method of the invention comprises modulating colony stimulating factor-1
CC (CSF-1) activity in order to modulate the immune response of the animal.
CC Also disclosed is a pharmaceutical composition comprising a modulator of
CC CSF-1 activity and a pharmaceutical carrier. The method or the
CC pharmaceutical composition is useful for the prophylactic or therapeutic
CC treatment of bacterially-induced septic shock. The sequences given in
CC records ACC74129-ACC74161 represent primers and probes used in an example
CC from the invention to detect murine genes
XX
SQ Sequence 25 BP; 6 A; 10 C; 3 G; 6 T; 0 U; 0 Other;

Query Match 0.5%; Score 20.2; DB 1; Length 25;
Best Local Similarity 88.0%; Pred. No. 1e+02;
Matches 22; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 556 TGGTGGCTGTGGAGACAAATCTAGC 580
|||||||||||||||||| | ||
Db 25 TGGTGGCTGTGGAGACAAAATTGGC 1

RESULT 30
AAI71235
ID AAI71235 standard; DNA; 20 BP.

```
XX
AC   AAI71235;
XX
DT   23-JAN-2002  (first entry)
XX
DE   Human Toll like receptor 4 PCR sense primer 2 SEQ ID NO:8.
XX
KW   Human; Toll like receptor; TLR; CD14; antibody; anti-CD14 antibody;
KW   TLR/CD14 binding inhibitor; antibacterial; immunosuppressive;
KW   antipyretic; hypertensive; immunostimulant; haemostatic; vasotropic;
KW   bacterial infection; sepsis; fever; hypotension; leukopaenia;
KW   thrombopaenia; shock; multi-organ failure; ss.
XX
OS   Homo sapiens.
XX
PN   WO200172993-A1.
XX
PD   04-OCT-2001.
XX
PF   02-APR-2001; 2001WO-JP002869.
XX
PR   31-MAR-2000; 2000JP-00099617.
PR   22-NOV-2000; 2000JP-00356719.
PR   28-MAR-2001; 2001US-00806158.
XX
PA   (MOCH ) MOCHIDA PHARM CO LTD.
XX
PI   Furusako S,  Mori S,  Shirakawa K,  Takahashi T;
XX
DR   WPI; 2001-616487/71.
XX
PT   Anti-CD14 antibody or its fragment inhibiting the binding of CD14 to Toll
PT   -like receptor, applicable in drugs for treating bacterial infection as
PT   well as sepsis, fever, hypotension, leukopenia, thrombopenia and shock.
XX
PS   Example 2; Page 169; 202pp; Japanese.
XX
CC   The present invention describes an anti-CD14 antibody, which has a
CC   function of inhibiting the binding of CD14 to the Toll-like receptor
CC   (TLR). The anti-CD14 antibody can specifically recognise the epitope
CC   containing the domain from numbers 269-315 in human CD14 of the sequence
CC   in AAG68127 or a part of it. Anti-CD14 antibody has antibacterial,
CC   immunosuppressive, antipyretic, hypertensive, immunostimulant,
CC   haemostatic and vasotropic activities. The antibody together with other
CC   polypeptides are applicable in drugs for treating bacterial infection as
CC   well as sepsis, fever, hypotension, leukopaenia, thrombopaenia, shock and
CC   multi-organ failure. AAG68127 to AAG68137 and AAI71230 to AAI71295
CC   represent sequences used in the exemplification of the present invention
XX
SQ   Sequence 20 BP; 4 A; 8 C; 3 G; 5 T; 0 U; 0 Other;

  Query Match             0.5%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 73;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        501 CCCATCCAGAGTTTAGCCCT 520
              ||||||||||||||||||||
Db          1 CCCATCCAGAGTTTAGCCCT 20


RESULT 31
AAC84818/c
ID   AAC84818 standard; DNA; 20 BP.
XX
AC   AAC84818;
XX
DT   20-APR-2001  (first entry)
XX
DE   Human TLR4 gene exon 4 amplifying reverse primer.
XX
KW   TLR4; toll receptor 4; innate immunity; gram-negative bacteria; sepsis;
KW   respiratory distress syndrome; LPS; lipopolysaccharide; asthma; ARDS;
KW   chronic airway disease; arthritis; inflammatory disease; SIRS; human;
KW   systematic inflammatory response syndrome; pyelonephritis; bronchitis;
KW   acute respiratory distress syndrome; gall bladder disease; pneumonia;
KW   cystic fibrosis; antibacterial; antiinflammatory; PCR primer; ss.
XX
OS   Homo sapiens.
XX
PN   WO200077204-A1.
XX
PD   21-DEC-2000.
XX
PF   08-JUN-2000; 2000WO-US015723.
XX
PR   10-JUN-1999;   99US-00329515.
XX
PA   (IOWA ) UNIV IOWA RES FOUND.
PA   (LORE/) LORENZ E.
XX
PI   Lorenz E,  Schwartz DA,  Schutte BC;
XX
DR   WPI; 2001-061872/07.
XX
PT   Identifying humans at risk of, or having indication associated with
PT   altered innate immunity involves detecting or determining whether DNA
PT   amplified from a biological sample encodes a portion of variant toll
PT   receptor 4.
XX
PS   Example 1; Page 31; 97pp; English.
XX
CC   The invention relates to human toll receptor 4 (TLR4) nucleic acid and
CC   methods to identify polymorphisms at the human TLR4 locus and to identify
CC   individuals at risk of, or having, an indication associated with altered
CC   innate immunity. A variant TLR4 nucleic acid is useful as a diagnostic
CC   reagent for detecting a polymorphism in human TLR4 gene. Since the
CC   presence of TLR4 mutation is associated with gram-negative sepsis,
CC   severity of sepsis, pre-term delivery and respiratory distress syndrome
CC   in pre-term infants, agents which alter TLR4 activity are useful for
CC   preventing or ameliorating infection by gram-negative bacteria, sepsis
CC   induced by gram-negative bacteria, LPS (lipopolysaccharide) induced
CC   chronic airway disease, asthma, arthritis, local and systemic
CC   inflammatory disease conditions such as systematic inflammatory response
CC   syndrome (SIRS) or acute respiratory distress syndrome (ARDS),
CC   pyelonephritis, gall bladder disease, pneumonia, bronchitis, chronic
CC   obstructive pulmonary disease, local gram-negative bacterial infection
CC   and cystic fibrosis. Sequences AAC84776-823 represent PCR primers for
CC   amplifying the exons of human TLR4 gene
XX
SQ   Sequence 20 BP; 3 A; 4 C; 8 G; 5 T; 0 U; 0 Other;

  Query Match             0.5%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 73;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2380 AGCACTTCATCCAGAGCCGC 2399
              ||||||||||||||||||||
Db         20 AGCACTTCATCCAGAGCCGC 1


RESULT 32
AAC84789
ID   AAC84789 standard; DNA; 20 BP.
XX
AC   AAC84789;
XX
DT   20-APR-2001  (first entry)
XX
DE   Human TLR4 gene exon 4 amplifying forward primer.
XX
KW   TLR4; toll receptor 4; innate immunity; gram-negative bacteria; sepsis;
KW   respiratory distress syndrome; LPS; lipopolysaccharide; asthma; ARDS;
KW   chronic airway disease; arthritis; inflammatory disease; SIRS; human;
KW   systematic inflammatory response syndrome; pyelonephritis; bronchitis;
KW   acute respiratory distress syndrome; gall bladder disease; pneumonia;
KW   cystic fibrosis; antibacterial; antiinflammatory; PCR primer; ss.
```

XX
OS Homo sapiens.
XX
PN WO200077204-A1.
XX
PD 21-DEC-2000.
XX
PF 08-JUN-2000; 2000WO-US015723.
XX
PR 10-JUN-1999; 99US-00329515.
XX
PA (IOWA) UNIV IOWA RES FOUND.
PA (LORE/) LORENZ E.
XX
PI Lorenz E, Schwartz DA, Schutte BC;
XX
DR WPI; 2001-061872/07.
XX
PT Identifying humans at risk of, or having indication associated with
PT altered innate immunity involves detecting or determining whether DNA
PT amplified from a biological sample encodes a portion of variant toll
PT receptor 4.
XX
PS Example 1; Page 31; 97pp; English.
XX
CC The invention relates to human toll receptor 4 (TLR4) nucleic acid and
CC methods to identify polymorphisms at the human TLR4 locus and to identify
CC individuals at risk of, or having, an indication associated with altered
CC innate immunity. A variant TLR4 nucleic acid is useful as a diagnostic
CC reagent for detecting a polymorphism in human TLR4 gene. Since the
CC presence of TLR4 mutation is associated with gram-negative sepsis,
CC severity of sepsis, pre-term delivery and respiratory distress syndrome
CC in pre-term infants, agents which alter TLR4 activity are useful for
CC preventing or ameliorating infection by gram-negative bacteria, sepsis
CC induced by gram-negative bacteria, LPS (lipopolysaccharide) induced
CC chronic airway disease, asthma, arthritis, local and systemic
CC inflammatory disease conditions such as systematic inflammatory response
CC syndrome (SIRS) or acute respiratory distress syndrome (ARDS),
CC pyelonephritis, gall bladder disease, pneumonia, bronchitis, chronic
CC obstructive pulmonary disease, local gram-negative bacterial infection
CC and cystic fibrosis. Sequences AAC84776-823 represent PCR primers for
CC amplifying the exons of human TLR4 gene
XX
SQ Sequence 20 BP; 6 A; 7 C; 2 G; 5 T; 0 U; 0 Other;

```
  Query Match             0.5%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 73;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1612 TCCAGGAAAACTTCCTTCCA 1631
              ||||||||||||||||||||
Db          1 TCCAGGAAAACTTCCTTCCA 20
```

RESULT 33
AAC84791
ID AAC84791 standard; DNA; 20 BP.
XX
AC AAC84791;
XX
DT 20-APR-2001 (first entry)
XX
DE Human TLR4 gene exon 4 amplifying forward primer.
XX
KW TLR4; toll receptor 4; innate immunity; gram-negative bacteria; sepsis;
KW respiratory distress syndrome; LPS; lipopolysaccharide; asthma; ARDS;
KW chronic airway disease; arthritis; inflammatory disease; SIRS; human;
KW systematic inflammatory response syndrome; pyelonephritis; bronchitis;
KW acute respiratory distress syndrome; gall bladder disease; pneumonia;
KW cystic fibrosis; antibacterial; antiinflammatory; PCR primer; ss.
XX
OS Homo sapiens.
XX
PN WO200077204-A1.
XX
PD 21-DEC-2000.
XX
PF 08-JUN-2000; 2000WO-US015723.
XX
PR 10-JUN-1999; 99US-00329515.
XX
PA (IOWA) UNIV IOWA RES FOUND.
PA (LORE/) LORENZ E.
XX
PI Lorenz E, Schwartz DA, Schutte BC;
XX
DR WPI; 2001-061872/07.
XX
PT Identifying humans at risk of, or having indication associated with
PT altered innate immunity involves detecting or determining whether DNA
PT amplified from a biological sample encodes a portion of variant toll
PT receptor 4.
XX
PS Example 1; Page 31; 97pp; English.
XX
CC The invention relates to human toll receptor 4 (TLR4) nucleic acid and
CC methods to identify polymorphisms at the human TLR4 locus and to identify
CC individuals at risk of, or having, an indication associated with altered
CC innate immunity. A variant TLR4 nucleic acid is useful as a diagnostic
CC reagent for detecting a polymorphism in human TLR4 gene. Since the
CC presence of TLR4 mutation is associated with gram-negative sepsis,
CC severity of sepsis, pre-term delivery and respiratory distress syndrome
CC in pre-term infants, agents which alter TLR4 activity are useful for
CC preventing or ameliorating infection by gram-negative bacteria, sepsis
CC induced by gram-negative bacteria, LPS (lipopolysaccharide) induced
CC chronic airway disease, asthma, arthritis, local and systemic
CC inflammatory disease conditions such as systematic inflammatory response
CC syndrome (SIRS) or acute respiratory distress syndrome (ARDS),
CC pyelonephritis, gall bladder disease, pneumonia, bronchitis, chronic
CC obstructive pulmonary disease, local gram-negative bacterial infection
CC and cystic fibrosis. Sequences AAC84776-823 represent PCR primers for
CC amplifying the exons of human TLR4 gene
XX
SQ Sequence 20 BP; 5 A; 5 C; 5 G; 5 T; 0 U; 0 Other;

```
  Query Match             0.5%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 73;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1924 ACCAGAGTTTCCTGCAATGG 1943
              ||||||||||||||||||||
Db          1 ACCAGAGTTTCCTGCAATGG 20
```

RESULT 34
AAC84798
ID AAC84798 standard; DNA; 20 BP.
XX
AC AAC84798;
XX
DT 20-APR-2001 (first entry)
XX
DE Human TLR4 gene exon 4 amplifying forward primer.
XX
KW TLR4; toll receptor 4; innate immunity; gram-negative bacteria; sepsis;
KW respiratory distress syndrome; LPS; lipopolysaccharide; asthma; ARDS;
KW chronic airway disease; arthritis; inflammatory disease; SIRS; human;
KW systematic inflammatory response syndrome; pyelonephritis; bronchitis;
KW acute respiratory distress syndrome; gall bladder disease; pneumonia;
KW cystic fibrosis; antibacterial; antiinflammatory; PCR primer; ss.
XX
OS Homo sapiens.
XX
PN WO200077204-A1.
XX
PD 21-DEC-2000.

```
XX
PF   08-JUN-2000; 2000WO-US015723.
XX
PR   10-JUN-1999;   99US-00329515.
XX
PA   (IOWA ) UNIV IOWA RES FOUND.
PA   (LORE/) LORENZ E.
XX
PI   Lorenz E,  Schwartz DA,  Schutte BC;
XX
DR   WPI; 2001-061872/07.
XX
PT   Identifying humans at risk of, or having indication associated with
PT   altered innate immunity involves detecting or determining whether DNA
PT   amplified from a biological sample encodes a portion of variant toll
PT   receptor 4.
XX
PS   Example 1; Page 31; 97pp; English.
XX
CC   The invention relates to human toll receptor 4 (TLR4) nucleic acid and
CC   methods to identify polymorphisms at the human TLR4 locus and to identify
CC   individuals at risk of, or having, an indication associated with altered
CC   innate immunity. A variant TLR4 nucleic acid is useful as a diagnostic
CC   reagent for detecting a polymorphism in human TLR4 gene. Since the
CC   presence of TLR4 mutation is associated with gram-negative sepsis,
CC   severity of sepsis, pre-term delivery and respiratory distress syndrome
CC   in pre-term infants, agents which alter TLR4 activity are useful for
CC   preventing or ameliorating infection by gram-negative bacteria, sepsis
CC   induced by gram-negative bacteria, LPS (lipopolysaccharide) induced
CC   chronic airway disease, asthma, arthritis, local and systemic
CC   inflammatory disease conditions such as systematic inflammatory response
CC   syndrome (SIRS) or acute respiratory distress syndrome (ARDS),
CC   pyelonephritis, gall bladder disease, pneumonia, bronchitis, chronic
CC   obstructive pulmonary disease, local gram-negative bacterial infection
CC   and cystic fibrosis. Sequences AAC84776-823 represent PCR primers for
CC   amplifying the exons of human TLR4 gene
XX
SQ   Sequence 20 BP; 7 A; 6 C; 5 G; 2 T; 0 U; 0 Other;

  Query Match             0.5%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 73;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2590 GACGACTCAGAAAAGCCCTG 2609
             ||||||||||||||||||||
Db          1 GACGACTCAGAAAAGCCCTG 20


RESULT 35
AAC84821/c
ID   AAC84821 standard; DNA; 20 BP.
XX
AC   AAC84821;
XX
DT   20-APR-2001  (first entry)
XX
DE   Human TLR4 gene exon 4 amplifying reverse primer.
XX
KW   TLR4; toll receptor 4; innate immunity; gram-negative bacteria; sepsis;
KW   respiratory distress syndrome; LPS; lipopolysaccharide; asthma; ARDS;
KW   chronic airway disease; arthritis; inflammatory disease; SIRS; human;
KW   systematic inflammatory response syndrome; pyelonephritis; bronchitis;
KW   acute respiratory distress syndrome; gall bladder disease; pneumonia;
KW   cystic fibrosis; antibacterial; antiinflammatory; PCR primer; ss.
XX
OS   Homo sapiens.
XX
PN   WO200077204-A1.
XX
PD   21-DEC-2000.
XX
PF   08-JUN-2000; 2000WO-US015723.
XX
PR   10-JUN-1999;   99US-00329515.
XX
PA   (IOWA ) UNIV IOWA RES FOUND.
PA   (LORE/) LORENZ E.
XX
PI   Lorenz E,  Schwartz DA,  Schutte BC;
XX
DR   WPI; 2001-061872/07.
XX
PT   Identifying humans at risk of, or having indication associated with
PT   altered innate immunity involves detecting or determining whether DNA
PT   amplified from a biological sample encodes a portion of variant toll
PT   receptor 4.
XX
PS   Example 1; Page 31; 97pp; English.
XX
CC   The invention relates to human toll receptor 4 (TLR4) nucleic acid and
CC   methods to identify polymorphisms at the human TLR4 locus and to identify
CC   individuals at risk of, or having, an indication associated with altered
CC   innate immunity. A variant TLR4 nucleic acid is useful as a diagnostic
CC   reagent for detecting a polymorphism in human TLR4 gene. Since the
CC   presence of TLR4 mutation is associated with gram-negative sepsis,
CC   severity of sepsis, pre-term delivery and respiratory distress syndrome
CC   in pre-term infants, agents which alter TLR4 activity are useful for
CC   preventing or ameliorating infection by gram-negative bacteria, sepsis
CC   induced by gram-negative bacteria, LPS (lipopolysaccharide) induced
CC   chronic airway disease, asthma, arthritis, local and systemic
CC   inflammatory disease conditions such as systematic inflammatory response
CC   syndrome (SIRS) or acute respiratory distress syndrome (ARDS),
CC   pyelonephritis, gall bladder disease, pneumonia, bronchitis, chronic
CC   obstructive pulmonary disease, local gram-negative bacterial infection
CC   and cystic fibrosis. Sequences AAC84776-823 represent PCR primers for
CC   amplifying the exons of human TLR4 gene
XX
SQ   Sequence 20 BP; 2 A; 5 C; 6 G; 7 T; 0 U; 0 Other;

  Query Match             0.5%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 73;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2590 GACGACTCAGAAAAGCCCTG 2609
             ||||||||||||||||||||
Db         20 GACGACTCAGAAAAGCCCTG 1


RESULT 36
AAC84775/c
ID   AAC84775 standard; DNA; 20 BP.
XX
AC   AAC84775;
XX
DT   20-APR-2001  (first entry)
XX
DE   Human TLR4 gene amplifying primer 2R.
XX
KW   TLR4; toll receptor 4; innate immunity; gram-negative bacteria; sepsis;
KW   respiratory distress syndrome; LPS; lipopolysaccharide; asthma; ARDS;
KW   chronic airway disease; arthritis; inflammatory disease; SIRS; human;
KW   systematic inflammatory response syndrome; pyelonephritis; bronchitis;
KW   acute respiratory distress syndrome; gall bladder disease; pneumonia;
KW   cystic fibrosis; antibacterial; antiinflammatory; PCR primer; ss.
XX
OS   Homo sapiens.
XX
PN   WO200077204-A1.
XX
PD   21-DEC-2000.
XX
PF   08-JUN-2000; 2000WO-US015723.
XX
PR   10-JUN-1999;   99US-00329515.
XX
PA   (IOWA ) UNIV IOWA RES FOUND.
```

PA (LORE/) LORENZ E.
XX
PI Lorenz E, Schwartz DA, Schutte BC;
XX
DR WPI; 2001-061872/07.
XX
PT Identifying humans at risk of, or having indication associated with
PT altered innate immunity involves detecting or determining whether DNA
PT amplified from a biological sample encodes a portion of variant toll
PT receptor 4.
XX
PS Example 1; Page 29; 97pp; English.
XX
CC The invention relates to human toll receptor 4 (TLR4) nucleic acid and
CC methods to identify polymorphisms at the human TLR4 locus and to identify
CC individuals at risk of, or having, an indication associated with altered
CC innate immunity. A variant TLR4 nucleic acid is useful as a diagnostic
CC reagent for detecting a polymorphism in human TLR4 gene. Since the
CC presence of TLR4 mutation is associated with gram-negative sepsis,
CC severity of sepsis, pre-term delivery and respiratory distress syndrome
CC in pre-term infants, agents which alter TLR4 activity are useful for
CC preventing or ameliorating infection by gram-negative bacteria, sepsis
CC induced by gram-negative bacteria, LPS (lipopolysaccharide) induced
CC chronic airway disease, asthma, arthritis, local and systemic
CC inflammatory disease conditions such as systematic inflammatory response
CC syndrome (SIRS) or acute respiratory distress syndrome (ARDS),
CC pyelonephritis, gall bladder disease, pneumonia, bronchitis, chronic
CC obstructive pulmonary disease, local gram-negative bacterial infection
CC and cystic fibrosis. Sequences AAC84772-775 represent PCR primers for
CC amplifying the human TLR4 gene
XX
SQ Sequence 20 BP; 2 A; 5 C; 6 G; 7 T; 0 U; 0 Other;

```
  Query Match             0.5%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 73;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2590 GACGACTCAGAAAAGCCCTG 2609
              ||||||||||||||||||||
Db         20 GACGACTCAGAAAAGCCCTG 1
```

RESULT 37
AAC84785
ID AAC84785 standard; DNA; 20 BP.
XX
AC AAC84785;
XX
DT 20-APR-2001 (first entry)
XX
DE Human TLR4 gene exon 4 amplifying forward primer.
XX
KW TLR4; toll receptor 4; innate immunity; gram-negative bacteria; sepsis;
KW respiratory distress syndrome; LPS; lipopolysaccharide; asthma; ARDS;
KW chronic airway disease; arthritis; inflammatory disease; SIRS; human;
KW systematic inflammatory response syndrome; pyelonephritis; bronchitis;
KW acute respiratory distress syndrome; gall bladder disease; pneumonia;
KW cystic fibrosis; antibacterial; antiinflammatory; PCR primer; ss.
XX
OS Homo sapiens.
XX
PN WO200077204-A1.
XX
PD 21-DEC-2000.
XX
PF 08-JUN-2000; 2000WO-US015723.
XX
PR 10-JUN-1999; 99US-00329515.
XX
PA (IOWA) UNIV IOWA RES FOUND.
PA (LORE/) LORENZ E.
XX
PI Lorenz E, Schwartz DA, Schutte BC;
XX
DR WPI; 2001-061872/07.
XX
PT Identifying humans at risk of, or having indication associated with
PT altered innate immunity involves detecting or determining whether DNA
PT amplified from a biological sample encodes a portion of variant toll
PT receptor 4.
XX
PS Example 1; Page 31; 97pp; English.
XX
CC The invention relates to human toll receptor 4 (TLR4) nucleic acid and
CC methods to identify polymorphisms at the human TLR4 locus and to identify
CC individuals at risk of, or having, an indication associated with altered
CC innate immunity. A variant TLR4 nucleic acid is useful as a diagnostic
CC reagent for detecting a polymorphism in human TLR4 gene. Since the
CC presence of TLR4 mutation is associated with gram-negative sepsis,
CC severity of sepsis, pre-term delivery and respiratory distress syndrome
CC in pre-term infants, agents which alter TLR4 activity are useful for
CC preventing or ameliorating infection by gram-negative bacteria, sepsis
CC induced by gram-negative bacteria, LPS (lipopolysaccharide) induced
CC chronic airway disease, asthma, arthritis, local and systemic
CC inflammatory disease conditions such as systematic inflammatory response
CC syndrome (SIRS) or acute respiratory distress syndrome (ARDS),
CC pyelonephritis, gall bladder disease, pneumonia, bronchitis, chronic
CC obstructive pulmonary disease, local gram-negative bacterial infection
CC and cystic fibrosis. Sequences AAC84776-823 represent PCR primers for
CC amplifying the exons of human TLR4 gene
XX
SQ Sequence 20 BP; 5 A; 5 C; 4 G; 6 T; 0 U; 0 Other;

```
  Query Match             0.5%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 73;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1190 TGGACAGTTTCCCACATTGA 1209
              ||||||||||||||||||||
Db          1 TGGACAGTTTCCCACATTGA 20
```

RESULT 38
AAC84792
ID AAC84792 standard; DNA; 20 BP.
XX
AC AAC84792;
XX
DT 20-APR-2001 (first entry)
XX
DE Human TLR4 gene exon 4 amplifying forward primer.
XX
KW TLR4; toll receptor 4; innate immunity; gram-negative bacteria; sepsis;
KW respiratory distress syndrome; LPS; lipopolysaccharide; asthma; ARDS;
KW chronic airway disease; arthritis; inflammatory disease; SIRS; human;
KW systematic inflammatory response syndrome; pyelonephritis; bronchitis;
KW acute respiratory distress syndrome; gall bladder disease; pneumonia;
KW cystic fibrosis; antibacterial; antiinflammatory; PCR primer; ss.
XX
OS Homo sapiens.
XX
PN WO200077204-A1.
XX
PD 21-DEC-2000.
XX
PF 08-JUN-2000; 2000WO-US015723.
XX
PR 10-JUN-1999; 99US-00329515.
XX
PA (IOWA) UNIV IOWA RES FOUND.
PA (LORE/) LORENZ E.
XX
PI Lorenz E, Schwartz DA, Schutte BC;
XX
DR WPI; 2001-061872/07.
XX

PT Identifying humans at risk of, or having indication associated with
PT altered innate immunity involves detecting or determining whether DNA
PT amplified from a biological sample encodes a portion of variant toll
PT receptor 4.
XX
PS Example 1; Page 31; 97pp; English.
XX
CC The invention relates to human toll receptor 4 (TLR4) nucleic acid and
CC methods to identify polymorphisms at the human TLR4 locus and to identify
CC individuals at risk of, or having, an indication associated with altered
CC innate immunity. A variant TLR4 nucleic acid is useful as a diagnostic
CC reagent for detecting a polymorphism in human TLR4 gene. Since the
CC presence of TLR4 mutation is associated with gram-negative sepsis,
CC severity of sepsis, pre-term delivery and respiratory distress syndrome
CC in pre-term infants, agents which alter TLR4 activity are useful for
CC preventing or ameliorating infection by gram-negative bacteria, sepsis
CC induced by gram-negative bacteria, LPS (lipopolysaccharide) induced
CC chronic airway disease, asthma, arthritis, local and systemic
CC inflammatory disease conditions such as systematic inflammatory response
CC syndrome (SIRS) or acute respiratory distress syndrome (ARDS),
CC pyelonephritis, gall bladder disease, pneumonia, bronchitis, chronic
CC obstructive pulmonary disease, local gram-negative bacterial infection
CC and cystic fibrosis. Sequences AAC84776-823 represent PCR primers for
CC amplifying the exons of human TLR4 gene
XX
SQ Sequence 20 BP; 3 A; 3 C; 6 G; 8 T; 0 U; 0 Other;

Query Match 0.5%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 73;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2017 TGCCTGTGCTGAGTTTGAAT 2036
||||||||||||||||||||
Db 1 TGCCTGTGCTGAGTTTGAAT 20

RESULT 39
AAC84799
ID AAC84799 standard; DNA; 20 BP.
XX
AC AAC84799;
XX
DT 20-APR-2001 (first entry)
XX
DE Human TLR4 gene exon 4 amplifying forward primer.
XX
KW TLR4; toll receptor 4; innate immunity; gram-negative bacteria; sepsis;
KW respiratory distress syndrome; LPS; lipopolysaccharide; asthma; ARDS;
KW chronic airway disease; arthritis; inflammatory disease; SIRS; human;
KW systematic inflammatory response syndrome; pyelonephritis; bronchitis;
KW acute respiratory distress syndrome; gall bladder disease; pneumonia;
KW cystic fibrosis; antibacterial; antiinflammatory; PCR primer; ss.
XX
OS Homo sapiens.
XX
PN WO200077204-A1.
XX
PD 21-DEC-2000.
XX
PF 08-JUN-2000; 2000WO-US015723.
XX
PR 10-JUN-1999; 99US-00329515.
XX
PA (IOWA) UNIV IOWA RES FOUND.
PA (LORE/) LORENZ E.
XX
PI Lorenz E, Schwartz DA, Schutte BC;
XX
DR WPI; 2001-061872/07.
XX
PT Identifying humans at risk of, or having indication associated with
PT altered innate immunity involves detecting or determining whether DNA
PT amplified from a biological sample encodes a portion of variant toll
PT receptor 4.
XX
PS Example 1; Page 31; 97pp; English.
XX
CC The invention relates to human toll receptor 4 (TLR4) nucleic acid and
CC methods to identify polymorphisms at the human TLR4 locus and to identify
CC individuals at risk of, or having, an indication associated with altered
CC innate immunity. A variant TLR4 nucleic acid is useful as a diagnostic
CC reagent for detecting a polymorphism in human TLR4 gene. Since the
CC presence of TLR4 mutation is associated with gram-negative sepsis,
CC severity of sepsis, pre-term delivery and respiratory distress syndrome
CC in pre-term infants, agents which alter TLR4 activity are useful for
CC preventing or ameliorating infection by gram-negative bacteria, sepsis
CC induced by gram-negative bacteria, LPS (lipopolysaccharide) induced
CC chronic airway disease, asthma, arthritis, local and systemic
CC inflammatory disease conditions such as systematic inflammatory response
CC syndrome (SIRS) or acute respiratory distress syndrome (ARDS),
CC pyelonephritis, gall bladder disease, pneumonia, bronchitis, chronic
CC obstructive pulmonary disease, local gram-negative bacterial infection
CC and cystic fibrosis. Sequences AAC84776-823 represent PCR primers for
CC amplifying the exons of human TLR4 gene
XX
SQ Sequence 20 BP; 8 A; 4 C; 5 G; 3 T; 0 U; 0 Other;

Query Match 0.5%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 73;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2658 AATTGGCAGGAAGCAACATC 2677
||||||||||||||||||||
Db 1 AATTGGCAGGAAGCAACATC 20

RESULT 40
AAC84825/c
ID AAC84825 standard; DNA; 20 BP.
XX
AC AAC84825;
XX
DT 20-APR-2001 (first entry)
XX
DE Reverse primer derived form human TLR4 gene exon 4.
XX
KW TLR4; toll receptor 4; innate immunity; gram-negative bacteria; sepsis;
KW respiratory distress syndrome; LPS; lipopolysaccharide; asthma; ARDS;
KW chronic airway disease; arthritis; inflammatory disease; SIRS; human;
KW systematic inflammatory response syndrome; pyelonephritis; bronchitis;
KW acute respiratory distress syndrome; gall bladder disease; pneumonia;
KW cystic fibrosis; antibacterial; antiinflammatory; PCR primer; ss.
XX
OS Homo sapiens.
XX
PN WO200077204-A1.
XX
PD 21-DEC-2000.
XX
PF 08-JUN-2000; 2000WO-US015723.
XX
PR 10-JUN-1999; 99US-00329515.
XX
PA (IOWA) UNIV IOWA RES FOUND.
PA (LORE/) LORENZ E.
XX
PI Lorenz E, Schwartz DA, Schutte BC;
XX
DR WPI; 2001-061872/07.
XX
PT Identifying humans at risk of, or having indication associated with
PT altered innate immunity involves detecting or determining whether DNA
PT amplified from a biological sample encodes a portion of variant toll
PT receptor 4.
XX
PS Example 1; Page 33; 97pp; English.

XX
CC The invention relates to human toll receptor 4 (TLR4) nucleic acid and
CC methods to identify polymorphisms at the human TLR4 locus and to identify
CC individuals at risk of, or having, an indication associated with altered
CC innate immunity. A variant TLR4 nucleic acid is useful as a diagnostic
CC reagent for detecting a polymorphism in human TLR4 gene. Since the
CC presence of TLR4 mutation is associated with gram-negative sepsis,
CC severity of sepsis, pre-term delivery and respiratory distress syndrome
CC in pre-term infants, agents which alter TLR4 activity are useful for
CC preventing or ameliorating infection by gram-negative bacteria, sepsis
CC induced by gram-negative bacteria, LPS (lipopolysaccharide) induced
CC chronic airway disease, asthma, arthritis, local and systemic
CC inflammatory disease conditions such as systematic inflammatory response
CC syndrome (SIRS) or acute respiratory distress syndrome (ARDS),
CC pyelonephritis, gall bladder disease, pneumonia, bronchitis, chronic
CC obstructive pulmonary disease, local gram-negative bacterial infection
CC and cystic fibrosis. The present sequence represents a reverse primer
CC derived form exon 4 of the human TLR4 gene, used in multi-tissue cDNA
CC expression screen
XX
SQ Sequence 20 BP; 4 A; 6 C; 4 G; 6 T; 0 U; 0 Other;

Query Match 0.5%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 73;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 448 ATGGGGCATATCAGAGCCTA 467
||||||||||||||||||||
Db 20 ATGGGGCATATCAGAGCCTA 1

RESULT 41
AAC84812/c
ID AAC84812 standard; DNA; 20 BP.
XX
AC AAC84812;
XX
DT 20-APR-2001 (first entry)
XX
DE Human TLR4 gene exon 4 amplifying reverse primer.
XX
KW TLR4; toll receptor 4; innate immunity; gram-negative bacteria; sepsis;
KW respiratory distress syndrome; LPS; lipopolysaccharide; asthma; ARDS;
KW chronic airway disease; arthritis; inflammatory disease; SIRS; human;
KW systematic inflammatory response syndrome; pyelonephritis; bronchitis;
KW acute respiratory distress syndrome; gall bladder disease; pneumonia;
KW cystic fibrosis; antibacterial; antiinflammatory; PCR primer; ss.
XX
OS Homo sapiens.
XX
PN WO200077204-A1.
XX
PD 21-DEC-2000.
XX
PF 08-JUN-2000; 2000WO-US015723.
XX
PR 10-JUN-1999; 99US-00329515.
XX
PA (IOWA) UNIV IOWA RES FOUND.
PA (LORE/) LORENZ E.
XX
PI Lorenz E, Schwartz DA, Schutte BC;
XX
DR WPI; 2001-061872/07.
XX
PT Identifying humans at risk of, or having indication associated with
PT altered innate immunity involves detecting or determining whether DNA
PT amplified from a biological sample encodes a portion of variant toll
PT receptor 4.
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PS Example 1; Page 31; 97pp; English.
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CC inflammatory disease conditions such as systematic inflammatory response
CC syndrome (SIRS) or acute respiratory distress syndrome (ARDS),
CC pyelonephritis, gall bladder disease, pneumonia, bronchitis, chronic
CC obstructive pulmonary disease, local gram-negative bacterial infection
CC and cystic fibrosis. Sequences AAC84776-823 represent PCR primers for
CC amplifying the exons of human TLR4 gene
XX
SQ Sequence 20 BP; 7 A; 3 C; 8 G; 2 T; 0 U; 0 Other;

Query Match 0.5%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 73;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1656 TTGACCTTCCTGGACCTCTC 1675
||||||||||||||||||||
Db 20 TTGACCTTCCTGGACCTCTC 1

RESULT 42
AAC84774
ID AAC84774 standard; DNA; 20 BP.
XX
AC AAC84774;
XX
DT 20-APR-2001 (first entry)
XX
DE Human TLR4 gene amplifying primer 2F.
XX
KW TLR4; toll receptor 4; innate immunity; gram-negative bacteria; sepsis;
KW respiratory distress syndrome; LPS; lipopolysaccharide; asthma; ARDS;
KW chronic airway disease; arthritis; inflammatory disease; SIRS; human;
KW systematic inflammatory response syndrome; pyelonephritis; bronchitis;
KW acute respiratory distress syndrome; gall bladder disease; pneumonia;
KW cystic fibrosis; antibacterial; antiinflammatory; PCR primer; ss.
XX
OS Homo sapiens.
XX
PN WO200077204-A1.
XX
PD 21-DEC-2000.
XX
PF 08-JUN-2000; 2000WO-US015723.
XX
PR 10-JUN-1999; 99US-00329515.
XX
PA (IOWA) UNIV IOWA RES FOUND.
PA (LORE/) LORENZ E.
XX
PI Lorenz E, Schwartz DA, Schutte BC;
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CC syndrome (SIRS) or acute respiratory distress syndrome (ARDS),
CC pyelonephritis, gall bladder disease, pneumonia, bronchitis, chronic
CC obstructive pulmonary disease, local gram-negative bacterial infection
CC and cystic fibrosis. Sequences AAC84772-775 represent PCR primers for
CC amplifying the human TLR4 gene
XX
SQ Sequence 20 BP; 4 A; 4 C; 6 G; 6 T; 0 U; 0 Other;

Query Match 0.5%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 73;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2467 TCATTGTCCTGCAGAAGGTG 2486
||||||||||||||||||||
Db 1 TCATTGTCCTGCAGAAGGTG 20

RESULT 43
AAC84804/c
ID AAC84804 standard; DNA; 20 BP.
XX
AC AAC84804;
XX
DT 20-APR-2001 (first entry)
XX
DE Human TLR4 gene exon 4 amplifying reverse primer.
XX
KW TLR4; toll receptor 4; innate immunity; gram-negative bacteria; sepsis;
KW respiratory distress syndrome; LPS; lipopolysaccharide; asthma; ARDS;
KW chronic airway disease; arthritis; inflammatory disease; SIRS; human;
KW systematic inflammatory response syndrome; pyelonephritis; bronchitis;
KW acute respiratory distress syndrome; gall bladder disease; pneumonia;
KW cystic fibrosis; antibacterial; antiinflammatory; PCR primer; ss.
XX
OS Homo sapiens.
XX
PN WO200077204-A1.
XX
PD 21-DEC-2000.
XX
PF 08-JUN-2000; 2000WO-US015723.
XX
PR 10-JUN-1999; 99US-00329515.
XX
PA (IOWA) UNIV IOWA RES FOUND.
PA (LORE/) LORENZ E.
XX
PI Lorenz E, Schwartz DA, Schutte BC;
XX
DR WPI; 2001-061872/07.
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CC syndrome (SIRS) or acute respiratory distress syndrome (ARDS),
CC pyelonephritis, gall bladder disease, pneumonia, bronchitis, chronic
CC obstructive pulmonary disease, local gram-negative bacterial infection
CC and cystic fibrosis. Sequences AAC84776-823 represent PCR primers for
CC amplifying the exons of human TLR4 gene
XX
SQ Sequence 20 BP; 7 A; 5 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 0.5%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 73;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 733 TTTATTGCACAGACTTGCGG 752
||||||||||||||||||||
Db 20 TTTATTGCACAGACTTGCGG 1

RESULT 44
AAC84813/c
ID AAC84813 standard; DNA; 20 BP.
XX
AC AAC84813;
XX
DT 20-APR-2001 (first entry)
XX
DE Human TLR4 gene exon 4 amplifying reverse primer.
XX
KW TLR4; toll receptor 4; innate immunity; gram-negative bacteria; sepsis;
KW respiratory distress syndrome; LPS; lipopolysaccharide; asthma; ARDS;
KW chronic airway disease; arthritis; inflammatory disease; SIRS; human;
KW systematic inflammatory response syndrome; pyelonephritis; bronchitis;
KW acute respiratory distress syndrome; gall bladder disease; pneumonia;
KW cystic fibrosis; antibacterial; antiinflammatory; PCR primer; ss.
XX
OS Homo sapiens.
XX
PN WO200077204-A1.
XX
PD 21-DEC-2000.
XX
PF 08-JUN-2000; 2000WO-US015723.
XX
PR 10-JUN-1999; 99US-00329515.
XX
PA (IOWA) UNIV IOWA RES FOUND.
PA (LORE/) LORENZ E.
XX
PI Lorenz E, Schwartz DA, Schutte BC;
XX
DR WPI; 2001-061872/07.
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PT Identifying humans at risk of, or having indication associated with
PT altered innate immunity involves detecting or determining whether DNA
PT amplified from a biological sample encodes a portion of variant toll
PT receptor 4.
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PS Example 1; Page 31; 97pp; English.
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CC innate immunity. A variant TLR4 nucleic acid is useful as a diagnostic
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CC induced by gram-negative bacteria, LPS (lipopolysaccharide) induced

```
CC   chronic airway disease, asthma, arthritis, local and systemic
CC   inflammatory disease conditions such as systematic inflammatory response
CC   syndrome (SIRS) or acute respiratory distress syndrome (ARDS),
CC   pyelonephritis, gall bladder disease, pneumonia, bronchitis, chronic
CC   obstructive pulmonary disease, local gram-negative bacterial infection
CC   and cystic fibrosis. Sequences AAC84776-823 represent PCR primers for
CC   amplifying the exons of human TLR4 gene
XX
SQ   Sequence 20 BP; 6 A; 4 C; 7 G; 3 T; 0 U; 0 Other;

  Query Match             0.5%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 73;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1788 TGTCTGAACTCCCTCCAGGT 1807
              ||||||||||||||||||||
Db         20 TGTCTGAACTCCCTCCAGGT 1

RESULT 45
AAC84820/c
ID   AAC84820 standard; DNA; 20 BP.
XX
AC   AAC84820;
XX
DT   20-APR-2001  (first entry)
XX
DE   Human TLR4 gene exon 4 amplifying reverse primer.
XX
KW   TLR4; toll receptor 4; innate immunity; gram-negative bacteria; sepsis;
KW   respiratory distress syndrome; LPS; lipopolysaccharide; asthma; ARDS;
KW   chronic airway disease; arthritis; inflammatory disease; SIRS; human;
KW   systematic inflammatory response syndrome; pyelonephritis; bronchitis;
KW   acute respiratory distress syndrome; gall bladder disease; pneumonia;
KW   cystic fibrosis; antibacterial; antiinflammatory; PCR primer; ss.
XX
OS   Homo sapiens.
XX
PN   WO200077204-A1.
XX
PD   21-DEC-2000.
XX
PF   08-JUN-2000; 2000WO-US015723.
XX
PR   10-JUN-1999;   99US-00329515.
XX
PA   (IOWA ) UNIV IOWA RES FOUND.
PA   (LORE/) LORENZ E.
XX
PI   Lorenz E,  Schwartz DA,  Schutte BC;
XX
DR   WPI; 2001-061872/07.
XX
PT   Identifying humans at risk of, or having indication associated with
PT   altered innate immunity involves detecting or determining whether DNA
PT   amplified from a biological sample encodes a portion of variant toll
PT   receptor 4.
XX
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CC   chronic airway disease, asthma, arthritis, local and systemic
CC   inflammatory disease conditions such as systematic inflammatory response
CC   syndrome (SIRS) or acute respiratory distress syndrome (ARDS),
CC   pyelonephritis, gall bladder disease, pneumonia, bronchitis, chronic
CC   obstructive pulmonary disease, local gram-negative bacterial infection
CC   and cystic fibrosis. Sequences AAC84776-823 represent PCR primers for
CC   amplifying the exons of human TLR4 gene
XX
SQ   Sequence 20 BP; 4 A; 5 C; 4 G; 7 T; 0 U; 0 Other;

  Query Match             0.5%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 73;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2659 ATTGGCAGGAAGCAACATCT 2678
              ||||||||||||||||||||
Db         20 ATTGGCAGGAAGCAACATCT 1

RESULT 46
AAC84822/c
ID   AAC84822 standard; DNA; 20 BP.
XX
AC   AAC84822;
XX
DT   20-APR-2001  (first entry)
XX
DE   Human TLR4 gene exon 4 amplifying reverse primer.
XX
KW   TLR4; toll receptor 4; innate immunity; gram-negative bacteria; sepsis;
KW   respiratory distress syndrome; LPS; lipopolysaccharide; asthma; ARDS;
KW   chronic airway disease; arthritis; inflammatory disease; SIRS; human;
KW   systematic inflammatory response syndrome; pyelonephritis; bronchitis;
KW   acute respiratory distress syndrome; gall bladder disease; pneumonia;
KW   cystic fibrosis; antibacterial; antiinflammatory; PCR primer; ss.
XX
OS   Homo sapiens.
XX
PN   WO200077204-A1.
XX
PD   21-DEC-2000.
XX
PF   08-JUN-2000; 2000WO-US015723.
XX
PR   10-JUN-1999;   99US-00329515.
XX
PA   (IOWA ) UNIV IOWA RES FOUND.
PA   (LORE/) LORENZ E.
XX
PI   Lorenz E,  Schwartz DA,  Schutte BC;
XX
DR   WPI; 2001-061872/07.
XX
PT   Identifying humans at risk of, or having indication associated with
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PT   amplified from a biological sample encodes a portion of variant toll
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XX
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CC   chronic airway disease, asthma, arthritis, local and systemic
CC   inflammatory disease conditions such as systematic inflammatory response
CC   syndrome (SIRS) or acute respiratory distress syndrome (ARDS),
CC   pyelonephritis, gall bladder disease, pneumonia, bronchitis, chronic
CC   obstructive pulmonary disease, local gram-negative bacterial infection
CC   and cystic fibrosis. Sequences AAC84776-823 represent PCR primers for
```

```
CC   amplifying the exons of human TLR4 gene
XX
SQ   Sequence 20 BP; 6 A; 4 C; 6 G; 4 T; 0 U; 0 Other;

  Query Match             0.5%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 73;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2725 CTGGGTCCAACACTTGTTCA 2744
              ||||||||||||||||||||
Db         20 CTGGGTCCAACACTTGTTCA 1


RESULT 47
AAC84773/c
ID   AAC84773 standard; DNA; 20 BP.
XX
AC   AAC84773;
XX
DT   20-APR-2001  (first entry)
XX
DE   Human TLR4 gene amplifying primer 1R.
XX
KW   TLR4; toll receptor 4; innate immunity; gram-negative bacteria; sepsis;
KW   respiratory distress syndrome; LPS; lipopolysaccharide; asthma; ARDS;
KW   chronic airway disease; arthritis; inflammatory disease; SIRS; human;
KW   systematic inflammatory response syndrome; pyelonephritis; bronchitis;
KW   acute respiratory distress syndrome; gall bladder disease; pneumonia;
KW   cystic fibrosis; antibacterial; antiinflammatory; PCR primer; ss.
XX
OS   Homo sapiens.
XX
PN   WO200077204-A1.
XX
PD   21-DEC-2000.
XX
PF   08-JUN-2000; 2000WO-US015723.
XX
PR   10-JUN-1999;   99US-00329515.
XX
PA   (IOWA ) UNIV IOWA RES FOUND.
PA   (LORE/) LORENZ E.
XX
PI   Lorenz E,  Schwartz DA,  Schutte BC;
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DR   WPI; 2001-061872/07.
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CC   pyelonephritis, gall bladder disease, pneumonia, bronchitis, chronic
CC   obstructive pulmonary disease, local gram-negative bacterial infection
CC   and cystic fibrosis. Sequences AAC84772-775 represent PCR primers for
CC   amplifying the human TLR4 gene
XX
SQ   Sequence 20 BP; 4 A; 4 C; 6 G; 6 T; 0 U; 0 Other;

  Query Match             0.5%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 73;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        587 AGAGAACTTCCCCATTGGAC 606
              ||||||||||||||||||||
Db         20 AGAGAACTTCCCCATTGGAC 1


RESULT 48
AAC84781
ID   AAC84781 standard; DNA; 20 BP.
XX
AC   AAC84781;
XX
DT   20-APR-2001  (first entry)
XX
DE   Human TLR4 gene exon 4 amplifying forward primer.
XX
KW   TLR4; toll receptor 4; innate immunity; gram-negative bacteria; sepsis;
KW   respiratory distress syndrome; LPS; lipopolysaccharide; asthma; ARDS;
KW   chronic airway disease; arthritis; inflammatory disease; SIRS; human;
KW   systematic inflammatory response syndrome; pyelonephritis; bronchitis;
KW   acute respiratory distress syndrome; gall bladder disease; pneumonia;
KW   cystic fibrosis; antibacterial; antiinflammatory; PCR primer; ss.
XX
OS   Homo sapiens.
XX
PN   WO200077204-A1.
XX
PD   21-DEC-2000.
XX
PF   08-JUN-2000; 2000WO-US015723.
XX
PR   10-JUN-1999;   99US-00329515.
XX
PA   (IOWA ) UNIV IOWA RES FOUND.
PA   (LORE/) LORENZ E.
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PI   Lorenz E,  Schwartz DA,  Schutte BC;
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DR   WPI; 2001-061872/07.
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PT   amplified from a biological sample encodes a portion of variant toll
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CC   induced by gram-negative bacteria, LPS (lipopolysaccharide) induced
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CC   inflammatory disease conditions such as systematic inflammatory response
CC   syndrome (SIRS) or acute respiratory distress syndrome (ARDS),
CC   pyelonephritis, gall bladder disease, pneumonia, bronchitis, chronic
CC   obstructive pulmonary disease, local gram-negative bacterial infection
CC   and cystic fibrosis. Sequences AAC84776-823 represent PCR primers for
CC   amplifying the exons of human TLR4 gene
XX
SQ   Sequence 20 BP; 5 A; 7 C; 3 G; 5 T; 0 U; 0 Other;

  Query Match             0.5%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 73;
```

```
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        700 ACTTGGACCTTTCCAGCAAC 719
              ||||||||||||||||||||
Db          1 ACTTGGACCTTTCCAGCAAC 20
```

RESULT 49
AAC84795
ID AAC84795 standard; DNA; 20 BP.
XX
AC AAC84795;
XX
DT 20-APR-2001 (first entry)
XX
DE Human TLR4 gene exon 4 amplifying forward primer.
XX
KW TLR4; toll receptor 4; innate immunity; gram-negative bacteria; sepsis;
KW respiratory distress syndrome; LPS; lipopolysaccharide; asthma; ARDS;
KW chronic airway disease; arthritis; inflammatory disease; SIRS; human;
KW systematic inflammatory response syndrome; pyelonephritis; bronchitis;
KW acute respiratory distress syndrome; gall bladder disease; pneumonia;
KW cystic fibrosis; antibacterial; antiinflammatory; PCR primer; ss.
XX
OS Homo sapiens.
XX
PN WO200077204-A1.
XX
PD 21-DEC-2000.
XX
PF 08-JUN-2000; 2000WO-US015723.
XX
PR 10-JUN-1999; 99US-00329515.
XX
PA (IOWA) UNIV IOWA RES FOUND.
PA (LORE/) LORENZ E.
XX
PI Lorenz E, Schwartz DA, Schutte BC;
XX
DR WPI; 2001-061872/07.
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CC in pre-term infants, agents which alter TLR4 activity are useful for
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CC induced by gram-negative bacteria, LPS (lipopolysaccharide) induced
CC chronic airway disease, asthma, arthritis, local and systemic
CC inflammatory disease conditions such as systematic inflammatory response
CC syndrome (SIRS) or acute respiratory distress syndrome (ARDS),
CC pyelonephritis, gall bladder disease, pneumonia, bronchitis, chronic
CC obstructive pulmonary disease, local gram-negative bacterial infection
CC and cystic fibrosis. Sequences AAC84776-823 represent PCR primers for
CC amplifying the exons of human TLR4 gene
XX
SQ Sequence 20 BP; 6 A; 2 C; 7 G; 5 T; 0 U; 0 Other;

```
  Query Match             0.5%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 73;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2351 AAGCCGAAAGGTGATTGTTG 2370
              ||||||||||||||||||||
Db          1 AAGCCGAAAGGTGATTGTTG 20
```

RESULT 50
AAC84824
ID AAC84824 standard; DNA; 20 BP.
XX
AC AAC84824;
XX
DT 20-APR-2001 (first entry)
XX
DE Forward primer derived form human TLR4 gene exon 1.
XX
KW TLR4; toll receptor 4; innate immunity; gram-negative bacteria; sepsis;
KW respiratory distress syndrome; LPS; lipopolysaccharide; asthma; ARDS;
KW chronic airway disease; arthritis; inflammatory disease; SIRS; human;
KW systematic inflammatory response syndrome; pyelonephritis; bronchitis;
KW acute respiratory distress syndrome; gall bladder disease; pneumonia;
KW cystic fibrosis; antibacterial; antiinflammatory; PCR primer; ss.
XX
OS Homo sapiens.
XX
PN WO200077204-A1.
XX
PD 21-DEC-2000.
XX
PF 08-JUN-2000; 2000WO-US015723.
XX
PR 10-JUN-1999; 99US-00329515.
XX
PA (IOWA) UNIV IOWA RES FOUND.
PA (LORE/) LORENZ E.
XX
PI Lorenz E, Schwartz DA, Schutte BC;
XX
DR WPI; 2001-061872/07.
XX
PT Identifying humans at risk of, or having indication associated with
PT altered innate immunity involves detecting or determining whether DNA
PT amplified from a biological sample encodes a portion of variant toll
PT receptor 4.
XX
PS Example 1; Page 33; 97pp; English.
XX
CC The invention relates to human toll receptor 4 (TLR4) nucleic acid and
CC methods to identify polymorphisms at the human TLR4 locus and to identify
CC individuals at risk of, or having, an indication associated with altered
CC innate immunity. A variant TLR4 nucleic acid is useful as a diagnostic
CC reagent for detecting a polymorphism in human TLR4 gene. Since the
CC presence of TLR4 mutation is associated with gram-negative sepsis,
CC severity of sepsis, pre-term delivery and respiratory distress syndrome
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CC preventing or ameliorating infection by gram-negative bacteria, sepsis
CC induced by gram-negative bacteria, LPS (lipopolysaccharide) induced
CC chronic airway disease, asthma, arthritis, local and systemic
CC inflammatory disease conditions such as systematic inflammatory response
CC syndrome (SIRS) or acute respiratory distress syndrome (ARDS),
CC pyelonephritis, gall bladder disease, pneumonia, bronchitis, chronic
CC obstructive pulmonary disease, local gram-negative bacterial infection
CC and cystic fibrosis. The present sequence represents a forward primer
CC derived form exon 1 of the human TLR4 gene, used in multi-tissue cDNA
CC expression screen
XX
SQ Sequence 20 BP; 7 A; 4 C; 7 G; 2 T; 0 U; 0 Other;

```
  Query Match             0.5%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 73;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy         15 GCTCACAGAAGCAGTGAGGA 34
              ||||||||||||||||||||
Db          1 GCTCACAGAAGCAGTGAGGA 20
```

```
RESULT 51
AAC84780
ID   AAC84780 standard; DNA; 20 BP.
XX
AC   AAC84780;
XX
DT   20-APR-2001  (first entry)
XX
DE   Human TLR4 gene exon 4 amplifying forward primer.
XX
KW   TLR4; toll receptor 4; innate immunity; gram-negative bacteria; sepsis;
KW   respiratory distress syndrome; LPS; lipopolysaccharide; asthma; ARDS;
KW   chronic airway disease; arthritis; inflammatory disease; SIRS; human;
KW   systematic inflammatory response syndrome; pyelonephritis; bronchitis;
KW   acute respiratory distress syndrome; gall bladder disease; pneumonia;
KW   cystic fibrosis; antibacterial; antiinflammatory; PCR primer; ss.
XX
OS   Homo sapiens.
XX
PN   WO200077204-A1.
XX
PD   21-DEC-2000.
XX
PF   08-JUN-2000; 2000WO-US015723.
XX
PR   10-JUN-1999;   99US-00329515.
XX
PA   (IOWA ) UNIV IOWA RES FOUND.
PA   (LORE/) LORENZ E.
XX
PI   Lorenz E,  Schwartz DA,  Schutte BC;
XX
DR   WPI; 2001-061872/07.
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CC   in pre-term infants, agents which alter TLR4 activity are useful for
CC   preventing or ameliorating infection by gram-negative bacteria, sepsis
CC   induced by gram-negative bacteria, LPS (lipopolysaccharide) induced
CC   chronic airway disease, asthma, arthritis, local and systemic
CC   inflammatory disease conditions such as systematic inflammatory response
CC   syndrome (SIRS) or acute respiratory distress syndrome (ARDS),
CC   pyelonephritis, gall bladder disease, pneumonia, bronchitis, chronic
CC   obstructive pulmonary disease, local gram-negative bacterial infection
CC   and cystic fibrosis. Sequences AAC84776-823 represent PCR primers for
CC   amplifying the exons of human TLR4 gene
XX
SQ   Sequence 20 BP; 5 A; 3 C; 8 G; 4 T; 0 U; 0 Other;

  Query Match             0.5%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 73;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        557 GGTGGCTGTGGAGACAAATC 576
              ||||||||||||||||||||
Db          1 GGTGGCTGTGGAGACAAATC 20


RESULT 52
```

```
AAC84815/c
ID   AAC84815 standard; DNA; 20 BP.
XX
AC   AAC84815;
XX
DT   20-APR-2001  (first entry)
XX
DE   Human TLR4 gene exon 4 amplifying reverse primer.
XX
KW   TLR4; toll receptor 4; innate immunity; gram-negative bacteria; sepsis;
KW   respiratory distress syndrome; LPS; lipopolysaccharide; asthma; ARDS;
KW   chronic airway disease; arthritis; inflammatory disease; SIRS; human;
KW   systematic inflammatory response syndrome; pyelonephritis; bronchitis;
KW   acute respiratory distress syndrome; gall bladder disease; pneumonia;
KW   cystic fibrosis; antibacterial; antiinflammatory; PCR primer; ss.
XX
OS   Homo sapiens.
XX
PN   WO200077204-A1.
XX
PD   21-DEC-2000.
XX
PF   08-JUN-2000; 2000WO-US015723.
XX
PR   10-JUN-1999;   99US-00329515.
XX
PA   (IOWA ) UNIV IOWA RES FOUND.
PA   (LORE/) LORENZ E.
XX
PI   Lorenz E,  Schwartz DA,  Schutte BC;
XX
DR   WPI; 2001-061872/07.
XX
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CC   severity of sepsis, pre-term delivery and respiratory distress syndrome
CC   in pre-term infants, agents which alter TLR4 activity are useful for
CC   preventing or ameliorating infection by gram-negative bacteria, sepsis
CC   induced by gram-negative bacteria, LPS (lipopolysaccharide) induced
CC   chronic airway disease, asthma, arthritis, local and systemic
CC   inflammatory disease conditions such as systematic inflammatory response
CC   syndrome (SIRS) or acute respiratory distress syndrome (ARDS),
CC   pyelonephritis, gall bladder disease, pneumonia, bronchitis, chronic
CC   obstructive pulmonary disease, local gram-negative bacterial infection
CC   and cystic fibrosis. Sequences AAC84776-823 represent PCR primers for
CC   amplifying the exons of human TLR4 gene
XX
SQ   Sequence 20 BP; 7 A; 6 C; 5 G; 2 T; 0 U; 0 Other;

  Query Match             0.5%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 73;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2074 CGGTCCTCAGTGTGCTTGTA 2093
              ||||||||||||||||||||
Db         20 CGGTCCTCAGTGTGCTTGTA 1


RESULT 53
AAC84816/c
ID   AAC84816 standard; DNA; 20 BP.
XX
```

AC AAC84816;
XX
DT 20-APR-2001 (first entry)
XX
DE Human TLR4 gene exon 4 amplifying reverse primer.
XX
KW TLR4; toll receptor 4; innate immunity; gram-negative bacteria; sepsis;
KW respiratory distress syndrome; LPS; lipopolysaccharide; asthma; ARDS;
KW chronic airway disease; arthritis; inflammatory disease; SIRS; human;
KW systematic inflammatory response syndrome; pyelonephritis; bronchitis;
KW acute respiratory distress syndrome; gall bladder disease; pneumonia;
KW cystic fibrosis; antibacterial; antiinflammatory; PCR primer; ss.
XX
OS Homo sapiens.
XX
PN WO200077204-A1.
XX
PD 21-DEC-2000.
XX
PF 08-JUN-2000; 2000WO-US015723.
XX
PR 10-JUN-1999; 99US-00329515.
XX
PA (IOWA) UNIV IOWA RES FOUND.
PA (LORE/) LORENZ E.
XX
PI Lorenz E, Schwartz DA, Schutte BC;
XX
DR WPI; 2001-061872/07.
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PT receptor 4.
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PS Example 1; Page 31; 97pp; English.
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CC induced by gram-negative bacteria, LPS (lipopolysaccharide) induced
CC chronic airway disease, asthma, arthritis, local and systemic
CC inflammatory disease conditions such as systematic inflammatory response
CC syndrome (SIRS) or acute respiratory distress syndrome (ARDS),
CC pyelonephritis, gall bladder disease, pneumonia, bronchitis, chronic
CC obstructive pulmonary disease, local gram-negative bacterial infection
CC and cystic fibrosis. Sequences AAC84776-823 represent PCR primers for
CC amplifying the exons of human TLR4 gene
XX
SQ Sequence 20 BP; 7 A; 4 C; 5 G; 4 T; 0 U; 0 Other;

Query Match 0.5%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 73;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
Qy       2142 CTTCTTGCTGGCTGCATAAA 2161
              ||||||||||||||||||||
Db         20 CTTCTTGCTGGCTGCATAAA 1
```

RESULT 54
AAC84819/c
ID AAC84819 standard; DNA; 20 BP.
XX
AC AAC84819;
XX
DT 20-APR-2001 (first entry)
XX
DE Human TLR4 gene exon 4 amplifying reverse primer.
XX
KW TLR4; toll receptor 4; innate immunity; gram-negative bacteria; sepsis;
KW respiratory distress syndrome; LPS; lipopolysaccharide; asthma; ARDS;
KW chronic airway disease; arthritis; inflammatory disease; SIRS; human;
KW systematic inflammatory response syndrome; pyelonephritis; bronchitis;
KW acute respiratory distress syndrome; gall bladder disease; pneumonia;
KW cystic fibrosis; antibacterial; antiinflammatory; PCR primer; ss.
XX
OS Homo sapiens.
XX
PN WO200077204-A1.
XX
PD 21-DEC-2000.
XX
PF 08-JUN-2000; 2000WO-US015723.
XX
PR 10-JUN-1999; 99US-00329515.
XX
PA (IOWA) UNIV IOWA RES FOUND.
PA (LORE/) LORENZ E.
XX
PI Lorenz E, Schwartz DA, Schutte BC;
XX
DR WPI; 2001-061872/07.
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PT altered innate immunity involves detecting or determining whether DNA
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PT receptor 4.
XX
PS Example 1; Page 31; 97pp; English.
XX
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CC pyelonephritis, gall bladder disease, pneumonia, bronchitis, chronic
CC obstructive pulmonary disease, local gram-negative bacterial infection
CC and cystic fibrosis. Sequences AAC84776-823 represent PCR primers for
CC amplifying the exons of human TLR4 gene
XX
SQ Sequence 20 BP; 3 A; 7 C; 5 G; 5 T; 0 U; 0 Other;

Query Match 0.5%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 73;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
Qy       2484 GTGGAGAAGACCCTGCTCAG 2503
              ||||||||||||||||||||
Db         20 GTGGAGAAGACCCTGCTCAG 1
```

RESULT 55
AAC84794
ID AAC84794 standard; DNA; 20 BP.
XX
AC AAC84794;
XX
DT 20-APR-2001 (first entry)
XX
DE Human TLR4 gene exon 4 amplifying forward primer.
XX

KW TLR4; toll receptor 4; innate immunity; gram-negative bacteria; sepsis;
KW respiratory distress syndrome; LPS; lipopolysaccharide; asthma; ARDS;
KW chronic airway disease; arthritis; inflammatory disease; SIRS; human;
KW systematic inflammatory response syndrome; pyelonephritis; bronchitis;
KW acute respiratory distress syndrome; gall bladder disease; pneumonia;
KW cystic fibrosis; antibacterial; antiinflammatory; PCR primer; ss.
XX
OS Homo sapiens.
XX
PN WO200077204-A1.
XX
PD 21-DEC-2000.
XX
PF 08-JUN-2000; 2000WO-US015723.
XX
PR 10-JUN-1999; 99US-00329515.
XX
PA (IOWA) UNIV IOWA RES FOUND.
PA (LORE/) LORENZ E.
XX
PI Lorenz E, Schwartz DA, Schutte BC;
XX
DR WPI; 2001-061872/07.
XX
PT Identifying humans at risk of, or having indication associated with
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PT receptor 4.
XX
PS Example 1; Page 31; 97pp; English.
XX
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CC inflammatory disease conditions such as systematic inflammatory response
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CC obstructive pulmonary disease, local gram-negative bacterial infection
CC and cystic fibrosis. Sequences AAC84776-823 represent PCR primers for
CC amplifying the exons of human TLR4 gene
XX
SQ Sequence 20 BP; 6 A; 3 C; 8 G; 3 T; 0 U; 0 Other;

Query Match 0.5%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 73;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2210 CCAGGATGAGGACTGGGTAA 2229
||||||||||||||||||||
Db 1 CCAGGATGAGGACTGGGTAA 20

RESULT 56
AAC84797
ID AAC84797 standard; DNA; 20 BP.
XX
AC AAC84797;
XX
DT 20-APR-2001 (first entry)
XX
DE Human TLR4 gene exon 4 amplifying forward primer.
XX
KW TLR4; toll receptor 4; innate immunity; gram-negative bacteria; sepsis;
KW respiratory distress syndrome; LPS; lipopolysaccharide; asthma; ARDS;
KW chronic airway disease; arthritis; inflammatory disease; SIRS; human;
KW systematic inflammatory response syndrome; pyelonephritis; bronchitis;
KW acute respiratory distress syndrome; gall bladder disease; pneumonia;
KW cystic fibrosis; antibacterial; antiinflammatory; PCR primer; ss.
XX
OS Homo sapiens.
XX
PN WO200077204-A1.
XX
PD 21-DEC-2000.
XX
PF 08-JUN-2000; 2000WO-US015723.
XX
PR 10-JUN-1999; 99US-00329515.
XX
PA (IOWA) UNIV IOWA RES FOUND.
PA (LORE/) LORENZ E.
XX
PI Lorenz E, Schwartz DA, Schutte BC;
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DR WPI; 2001-061872/07.
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PT receptor 4.
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CC and cystic fibrosis. Sequences AAC84776-823 represent PCR primers for
CC amplifying the exons of human TLR4 gene
XX
SQ Sequence 20 BP; 4 A; 4 C; 6 G; 6 T; 0 U; 0 Other;

Query Match 0.5%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 73;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2467 TCATTGTCCTGCAGAAGGTG 2486
||||||||||||||||||||
Db 1 TCATTGTCCTGCAGAAGGTG 20

RESULT 57
AAC84809/c
ID AAC84809 standard; DNA; 20 BP.
XX
AC AAC84809;
XX
DT 20-APR-2001 (first entry)
XX
DE Human TLR4 gene exon 4 amplifying reverse primer.
XX
KW TLR4; toll receptor 4; innate immunity; gram-negative bacteria; sepsis;
KW respiratory distress syndrome; LPS; lipopolysaccharide; asthma; ARDS;
KW chronic airway disease; arthritis; inflammatory disease; SIRS; human;
KW systematic inflammatory response syndrome; pyelonephritis; bronchitis;
KW acute respiratory distress syndrome; gall bladder disease; pneumonia;
KW cystic fibrosis; antibacterial; antiinflammatory; PCR primer; ss.

XX
OS Homo sapiens.
XX
PN WO200077204-A1.
XX
PD 21-DEC-2000.
XX
PF 08-JUN-2000; 2000WO-US015723.
XX
PR 10-JUN-1999; 99US-00329515.
XX
PA (IOWA) UNIV IOWA RES FOUND.
PA (LORE/) LORENZ E.
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DR WPI; 2001-061872/07.
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CC and cystic fibrosis. Sequences AAC84776-823 represent PCR primers for
CC amplifying the exons of human TLR4 gene
XX
SQ Sequence 20 BP; 3 A; 5 C; 5 G; 7 T; 0 U; 0 Other;

Query Match 0.5%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 73;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1351 TTGGGACAACCAGCCTAAAG 1370
||||||||||||||||||||
Db 20 TTGGGACAACCAGCCTAAAG 1

RESULT 58
AAC84811/c
ID AAC84811 standard; DNA; 20 BP.
XX
AC AAC84811;
XX
DT 20-APR-2001 (first entry)
XX
DE Human TLR4 gene exon 4 amplifying reverse primer.
XX
KW TLR4; toll receptor 4; innate immunity; gram-negative bacteria; sepsis;
KW respiratory distress syndrome; LPS; lipopolysaccharide; asthma; ARDS;
KW chronic airway disease; arthritis; inflammatory disease; SIRS; human;
KW systematic inflammatory response syndrome; pyelonephritis; bronchitis;
KW acute respiratory distress syndrome; gall bladder disease; pneumonia;
KW cystic fibrosis; antibacterial; antiinflammatory; PCR primer; ss.
XX
OS Homo sapiens.
XX
PN WO200077204-A1.
XX
PD 21-DEC-2000.
XX
PF 08-JUN-2000; 2000WO-US015723.
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XX
PA (IOWA) UNIV IOWA RES FOUND.
PA (LORE/) LORENZ E.
XX
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DR WPI; 2001-061872/07.
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CC and cystic fibrosis. Sequences AAC84776-823 represent PCR primers for
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XX
SQ Sequence 20 BP; 6 A; 6 C; 5 G; 3 T; 0 U; 0 Other;

Query Match 0.5%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 73;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1568 TGGCTTGTCCAGTCTCGAAG 1587
||||||||||||||||||||
Db 20 TGGCTTGTCCAGTCTCGAAG 1

RESULT 59
AAC84788
ID AAC84788 standard; DNA; 20 BP.
XX
AC AAC84788;
XX
DT 20-APR-2001 (first entry)
XX
DE Human TLR4 gene exon 4 amplifying forward primer.
XX
KW TLR4; toll receptor 4; innate immunity; gram-negative bacteria; sepsis;
KW respiratory distress syndrome; LPS; lipopolysaccharide; asthma; ARDS;
KW chronic airway disease; arthritis; inflammatory disease; SIRS; human;
KW systematic inflammatory response syndrome; pyelonephritis; bronchitis;
KW acute respiratory distress syndrome; gall bladder disease; pneumonia;
KW cystic fibrosis; antibacterial; antiinflammatory; PCR primer; ss.
XX
OS Homo sapiens.
XX
PN WO200077204-A1.
XX
PD 21-DEC-2000.

XX
PF 08-JUN-2000; 2000WO-US015723.
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PA (IOWA) UNIV IOWA RES FOUND.
PA (LORE/) LORENZ E.
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CC inflammatory disease conditions such as systematic inflammatory response
CC syndrome (SIRS) or acute respiratory distress syndrome (ARDS),
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CC obstructive pulmonary disease, local gram-negative bacterial infection
CC and cystic fibrosis. Sequences AAC84776-823 represent PCR primers for
CC amplifying the exons of human TLR4 gene
XX
SQ Sequence 20 BP; 5 A; 4 C; 5 G; 6 T; 0 U; 0 Other;

```
  Query Match             0.5%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 73;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1541 CAGAGTTGCTTTCAATGGCA 1560
              ||||||||||||||||||||
Db          1 CAGAGTTGCTTTCAATGGCA 20
```

RESULT 60
AAC84793
ID AAC84793 standard; DNA; 20 BP.
XX
AC AAC84793;
XX
DT 20-APR-2001 (first entry)
XX
DE Human TLR4 gene exon 4 amplifying forward primer.
XX
KW TLR4; toll receptor 4; innate immunity; gram-negative bacteria; sepsis;
KW respiratory distress syndrome; LPS; lipopolysaccharide; asthma; ARDS;
KW chronic airway disease; arthritis; inflammatory disease; SIRS; human;
KW systematic inflammatory response syndrome; pyelonephritis; bronchitis;
KW acute respiratory distress syndrome; gall bladder disease; pneumonia;
KW cystic fibrosis; antibacterial; antiinflammatory; PCR primer; ss.
XX
OS Homo sapiens.
XX
PN WO200077204-A1.
XX
PD 21-DEC-2000.
XX
PF 08-JUN-2000; 2000WO-US015723.
XX
PR 10-JUN-1999; 99US-00329515.
XX
PA (IOWA) UNIV IOWA RES FOUND.
PA (LORE/) LORENZ E.
XX
PI Lorenz E, Schwartz DA, Schutte BC;
XX
DR WPI; 2001-061872/07.
XX
PT Identifying humans at risk of, or having indication associated with
PT altered innate immunity involves detecting or determining whether DNA
PT amplified from a biological sample encodes a portion of variant toll
PT receptor 4.
XX
PS Example 1; Page 31; 97pp; English.
XX
CC The invention relates to human toll receptor 4 (TLR4) nucleic acid and
CC methods to identify polymorphisms at the human TLR4 locus and to identify
CC individuals at risk of, or having, an indication associated with altered
CC innate immunity. A variant TLR4 nucleic acid is useful as a diagnostic
CC reagent for detecting a polymorphism in human TLR4 gene. Since the
CC presence of TLR4 mutation is associated with gram-negative sepsis,
CC severity of sepsis, pre-term delivery and respiratory distress syndrome
CC in pre-term infants, agents which alter TLR4 activity are useful for
CC preventing or ameliorating infection by gram-negative bacteria, sepsis
CC induced by gram-negative bacteria, LPS (lipopolysaccharide) induced
CC chronic airway disease, asthma, arthritis, local and systemic
CC inflammatory disease conditions such as systematic inflammatory response
CC syndrome (SIRS) or acute respiratory distress syndrome (ARDS),
CC pyelonephritis, gall bladder disease, pneumonia, bronchitis, chronic
CC obstructive pulmonary disease, local gram-negative bacterial infection
CC and cystic fibrosis. Sequences AAC84776-823 represent PCR primers for
CC amplifying the exons of human TLR4 gene
XX
SQ Sequence 20 BP; 2 A; 5 C; 6 G; 7 T; 0 U; 0 Other;

```
  Query Match             0.5%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 73;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2074 CGGTCCTCAGTGTGCTTGTA 2093
              ||||||||||||||||||||
Db          1 CGGTCCTCAGTGTGCTTGTA 20
```

RESULT 61
AAC84817/c
ID AAC84817 standard; DNA; 20 BP.
XX
AC AAC84817;
XX
DT 20-APR-2001 (first entry)
XX
DE Human TLR4 gene exon 4 amplifying reverse primer.
XX
KW TLR4; toll receptor 4; innate immunity; gram-negative bacteria; sepsis;
KW respiratory distress syndrome; LPS; lipopolysaccharide; asthma; ARDS;
KW chronic airway disease; arthritis; inflammatory disease; SIRS; human;
KW systematic inflammatory response syndrome; pyelonephritis; bronchitis;
KW acute respiratory distress syndrome; gall bladder disease; pneumonia;
KW cystic fibrosis; antibacterial; antiinflammatory; PCR primer; ss.
XX
OS Homo sapiens.
XX
PN WO200077204-A1.
XX
PD 21-DEC-2000.
XX
PF 08-JUN-2000; 2000WO-US015723.
XX
PR 10-JUN-1999; 99US-00329515.
XX
PA (IOWA) UNIV IOWA RES FOUND.

PA (LORE/) LORENZ E.
XX
PI Lorenz E, Schwartz DA, Schutte BC;
XX
DR WPI; 2001-061872/07.
XX
PT Identifying humans at risk of, or having indication associated with
PT altered innate immunity involves detecting or determining whether DNA
PT amplified from a biological sample encodes a portion of variant toll
PT receptor 4.
XX
PS Example 1; Page 31; 97pp; English.
XX
CC The invention relates to human toll receptor 4 (TLR4) nucleic acid and
CC methods to identify polymorphisms at the human TLR4 locus and to identify
CC individuals at risk of, or having, an indication associated with altered
CC innate immunity. A variant TLR4 nucleic acid is useful as a diagnostic
CC reagent for detecting a polymorphism in human TLR4 gene. Since the
CC presence of TLR4 mutation is associated with gram-negative sepsis,
CC severity of sepsis, pre-term delivery and respiratory distress syndrome
CC in pre-term infants, agents which alter TLR4 activity are useful for
CC preventing or ameliorating infection by gram-negative bacteria, sepsis
CC induced by gram-negative bacteria, LPS (lipopolysaccharide) induced
CC chronic airway disease, asthma, arthritis, local and systemic
CC inflammatory disease conditions such as systematic inflammatory response
CC syndrome (SIRS) or acute respiratory distress syndrome (ARDS),
CC pyelonephritis, gall bladder disease, pneumonia, bronchitis, chronic
CC obstructive pulmonary disease, local gram-negative bacterial infection
CC and cystic fibrosis. Sequences AAC84776-823 represent PCR primers for
CC amplifying the exons of human TLR4 gene
XX
SQ Sequence 20 BP; 4 A; 7 C; 4 G; 5 T; 0 U; 0 Other;

Query Match 0.5%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 73;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2250 TTAGAAGAAGGGGTGCCTCC 2269
||||||||||||||||||||
Db 20 TTAGAAGAAGGGGTGCCTCC 1

RESULT 62
AAC84814/c
ID AAC84814 standard; DNA; 20 BP.
XX
AC AAC84814;
XX
DT 20-APR-2001 (first entry)
XX
DE Human TLR4 gene exon 4 amplifying reverse primer.
XX
KW TLR4; toll receptor 4; innate immunity; gram-negative bacteria; sepsis;
KW respiratory distress syndrome; LPS; lipopolysaccharide; asthma; ARDS;
KW chronic airway disease; arthritis; inflammatory disease; SIRS; human;
KW systematic inflammatory response syndrome; pyelonephritis; bronchitis;
KW acute respiratory distress syndrome; gall bladder disease; pneumonia;
KW cystic fibrosis; antibacterial; antiinflammatory; PCR primer; ss.
XX
OS Homo sapiens.
XX
PN WO200077204-A1.
XX
PD 21-DEC-2000.
XX
PF 08-JUN-2000; 2000WO-US015723.
XX
PR 10-JUN-1999; 99US-00329515.
XX
PA (IOWA) UNIV IOWA RES FOUND.
PA (LORE/) LORENZ E.
XX
PI Lorenz E, Schwartz DA, Schutte BC;
XX
DR WPI; 2001-061872/07.
XX
PT Identifying humans at risk of, or having indication associated with
PT altered innate immunity involves detecting or determining whether DNA
PT amplified from a biological sample encodes a portion of variant toll
PT receptor 4.
XX
PS Example 1; Page 31; 97pp; English.
XX
CC The invention relates to human toll receptor 4 (TLR4) nucleic acid and
CC methods to identify polymorphisms at the human TLR4 locus and to identify
CC individuals at risk of, or having, an indication associated with altered
CC innate immunity. A variant TLR4 nucleic acid is useful as a diagnostic
CC reagent for detecting a polymorphism in human TLR4 gene. Since the
CC presence of TLR4 mutation is associated with gram-negative sepsis,
CC severity of sepsis, pre-term delivery and respiratory distress syndrome
CC in pre-term infants, agents which alter TLR4 activity are useful for
CC preventing or ameliorating infection by gram-negative bacteria, sepsis
CC induced by gram-negative bacteria, LPS (lipopolysaccharide) induced
CC chronic airway disease, asthma, arthritis, local and systemic
CC inflammatory disease conditions such as systematic inflammatory response
CC syndrome (SIRS) or acute respiratory distress syndrome (ARDS),
CC pyelonephritis, gall bladder disease, pneumonia, bronchitis, chronic
CC obstructive pulmonary disease, local gram-negative bacterial infection
CC and cystic fibrosis. Sequences AAC84776-823 represent PCR primers for
CC amplifying the exons of human TLR4 gene
XX
SQ Sequence 20 BP; 3 A; 6 C; 5 G; 6 T; 0 U; 0 Other;

Query Match 0.5%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 73;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1947 AAGGACCAGAGGCAGCTCTT 1966
||||||||||||||||||||
Db 20 AAGGACCAGAGGCAGCTCTT 1

RESULT 63
AAC84772
ID AAC84772 standard; DNA; 20 BP.
XX
AC AAC84772;
XX
DT 20-APR-2001 (first entry)
XX
DE Human TLR4 gene amplifying primer 1F.
XX
KW TLR4; toll receptor 4; innate immunity; gram-negative bacteria; sepsis;
KW respiratory distress syndrome; LPS; lipopolysaccharide; asthma; ARDS;
KW chronic airway disease; arthritis; inflammatory disease; SIRS; human;
KW systematic inflammatory response syndrome; pyelonephritis; bronchitis;
KW acute respiratory distress syndrome; gall bladder disease; pneumonia;
KW cystic fibrosis; antibacterial; antiinflammatory; PCR primer; ss.
XX
OS Homo sapiens.
XX
PN WO200077204-A1.
XX
PD 21-DEC-2000.
XX
PF 08-JUN-2000; 2000WO-US015723.
XX
PR 10-JUN-1999; 99US-00329515.
XX
PA (IOWA) UNIV IOWA RES FOUND.
PA (LORE/) LORENZ E.
XX
PI Lorenz E, Schwartz DA, Schutte BC;
XX
DR WPI; 2001-061872/07.
XX

```
PT   Identifying humans at risk of, or having indication associated with
PT   altered innate immunity involves detecting or determining whether DNA
PT   amplified from a biological sample encodes a portion of variant toll
PT   receptor 4.
XX
PS   Example 1; Page 29; 97pp; English.
XX
CC   The invention relates to human toll receptor 4 (TLR4) nucleic acid and
CC   methods to identify polymorphisms at the human TLR4 locus and to identify
CC   individuals at risk of, or having, an indication associated with altered
CC   innate immunity. A variant TLR4 nucleic acid is useful as a diagnostic
CC   reagent for detecting a polymorphism in human TLR4 gene. Since the
CC   presence of TLR4 mutation is associated with gram-negative sepsis,
CC   severity of sepsis, pre-term delivery and respiratory distress syndrome
CC   in pre-term infants, agents which alter TLR4 activity are useful for
CC   preventing or ameliorating infection by gram-negative bacteria, sepsis
CC   induced by gram-negative bacteria, LPS (lipopolysaccharide) induced
CC   chronic airway disease, asthma, arthritis, local and systemic
CC   inflammatory disease conditions such as systematic inflammatory response
CC   syndrome (SIRS) or acute respiratory distress syndrome (ARDS),
CC   pyelonephritis, gall bladder disease, pneumonia, bronchitis, chronic
CC   obstructive pulmonary disease, local gram-negative bacterial infection
CC   and cystic fibrosis. Sequences AAC84772-775 represent PCR primers for
CC   amplifying the human TLR4 gene
XX
SQ   Sequence 20 BP; 6 A; 4 C; 6 G; 4 T; 0 U; 0 Other;

  Query Match             0.5%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 73;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        448 ATGGGGCATATCAGAGCCTA 467
              ||||||||||||||||||||
Db          1 ATGGGGCATATCAGAGCCTA 20


RESULT 64
AAL41015
ID   AAL41015 standard; DNA; 20 BP.
XX
AC   AAL41015;
XX
DT   11-OCT-2002  (first entry)
XX
DE   Anti-CD14 monoclonal antibody related oligonucleotide #3.
XX
KW   Immunosuppressive; antibacterial; anti-CD14 antibody; epitope; sepsis;
KW   human CD14; ds.
XX
OS   Unidentified.
XX
PN   WO200242333-A1.
XX
PD   30-MAY-2002.
XX
PF   28-SEP-2001; 2001WO-JP008563.
XX
PR   22-NOV-2000; 2000JP-00356719.
XX
PA   (MOCH ) MOCHIDA PHARM CO LTD.
XX
PI   Furusako S,  Shirakawa K,  Mori S;
XX
DR   WPI; 2002-454920/48.
XX
PT   Anti-CD14 monoclonal antibody which inhibits CD14/T lymphocyte receptor
PT   binding by specifically recognizing epitope in human CD14 domain to
PT   prevent interaction and suppress cell activation, useful for treating
PT   sepsis.
XX
PS   Example 2; Page 46; 156pp; Japanese.
XX
CC   The invention relates to an anti-CD14 antibody which can specifically
CC   recognise an epitope containing a part of a domain with not less than 8
CC   amino acids in human CD14 in the region from positions 269-315 in a fully
CC   defined sequence of 356 amino acids as given in the specification. The
CC   antibody is useful in drug compositions for treating sepsis and for
CC   screening remedies for sepsis. This polynucleotide sequence represents
CC   anti-CD14 related oligonucleotide of the invention
XX
SQ   Sequence 20 BP; 4 A; 8 C; 3 G; 5 T; 0 U; 0 Other;

  Query Match             0.5%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 73;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        501 CCCATCCAGAGTTTAGCCCT 520
              ||||||||||||||||||||
Db          1 CCCATCCAGAGTTTAGCCCT 20


RESULT 65
ADB39124
ID   ADB39124 standard; DNA; 20 BP.
XX
AC   ADB39124;
XX
DT   04-DEC-2003  (first entry)
XX
DE   Human toll-like receptor (TLR) -4 RT-PCR primer Seq ID3.
XX
KW   vascular disease; Toll-like receptor-4 inhibitor; TLR-4 inhibitor;
KW   atherosclerosis; restenosis; inflammation; vasotropic;
KW   antiarteriosclerotic; thrombolytic; cardiant; antiinflammatory;
KW   antisense therapy; gene therapy; transplant atherosclerosis;
KW   vein-graft atherosclerosis; thrombosis; stent restenosis;
KW   angioplasty restenosis; heart disease; PCR; primer;
KW   reverse transcription polymerase chain reaction; RT-PCR; human; ss;
KW   TLR-4; Toll-like receptor 4.
XX
OS   Homo sapiens.
XX
PN   US2003077279-A1.
XX
PD   24-APR-2003.
XX
PF   23-APR-2002; 2002US-00128166.
XX
PR   24-OCT-2001; 2001US-0335637P.
PR   17-DEC-2001; 2001US-0341359P.
XX
PA   (CEDA-) CEDARS SINAI MEDICAL CENT.
XX
PI   Arditi M,  Rajavashisth T,  Shah PK;
XX
DR   WPI; 2003-615988/58.
XX
PT   Treating a vascular disease, particularly atherosclerosis, thrombosis,
PT   restenosis, stent restenosis or angioplasty restenosis, by administering
PT   a Toll-like receptor-4 (TLR-4) inhibitor to a mammal.
XX
PS   Example 6; Page 10; 21pp; English.
XX
CC   This invention relates to a novel method for the treatment of a vascular
CC   disease through the administration of a Toll-like receptor-4 (TLR-4)
CC   inhibitor to a mammal. The TLR-4 protein has been linked to several
CC   disease such as atherosclerosis, restenosis, inflammation and other
CC   vascular diseases. Compounds which inhibit the activity of TLR-4, through
CC   the inhibition of its receptor, may have vasotropic,
CC   antiarteriosclerotic, thrombolytic, cardiant and antiinflammatory
CC   activities. This may also be achieved through antisense therapy or gene
CC   therapy. The method or the system of the invention may therefore be
CC   useful for inhibiting or treating a vascular disease, for example
CC   atherosclerosis, transplant atherosclerosis, vein-graft atherosclerosis,
CC   thrombosis, restenosis, stent restenosis, angioplasty restenosis, or
CC   inflammation and other heart disease. The present sequence is that of a
```

```
CC   PCR primer which was used for reverse transcription polymerase chain
CC   reaction amplification of human TLR-4 in the exemplification of the
CC   invention.
XX
SQ   Sequence 20 BP; 5 A; 3 C; 4 G; 8 T; 0 U; 0 Other;

  Query Match             0.5%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 73;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1768 TGGATACGTTTCCTTATAAG 1787
              ||||||||||||||||||||
Db          1 TGGATACGTTTCCTTATAAG 20


RESULT 66
ADF17208
ID   ADF17208 standard; DNA; 20 BP.
XX
AC   ADF17208;
XX
DT   12-FEB-2004  (first entry)
XX
DE   Human toll-like receptor 4 (TLR4) gene PCR primer #2.
XX
KW   therapeutic agent; endothelial disorder; 3-amino-1;
KW   2-benzisothiazole compound; endothelial disorders; toxaemia;
KW   severe toxaemia; toxic shock; haemorrhagic shock;
KW   alcohol induced cirrhosis; adult respiratory distress syndrome;
KW   chronic rheumatoid arthritis; ulcerative gastritis; Crohn's disease;
KW   .glomerulonephritis; infectious carditis; systemic lupus erythematosus;
KW   scleroderma; Sjoegren's syndrome; multiple organ failure;
KW   autoimmune disease; multiple sclerosis; PCR; primer; ss; human;
KW   toll-like receptor 4; TLR4.
XX
OS   Homo sapiens.
XX
PN   WO2003087072-A1.
XX
PD   23-OCT-2003.
XX
PF   31-MAR-2003; 2003WO-JP004108.
XX
PR   29-MAR-2002; 2002JP-00132121.
XX
PA   (MOCH ) MOCHIDA PHARM CO LTD.
XX
PI   Furusako S,  Satoh T,  Nakamura M,  Mizuno M,  Mori S;
XX
DR   WPI; 2003-903121/82.
XX
PT   Agents for treating diseases associated with endothelial disorders,
PT   toxemia or toll like receptor signaling comprise new or known 3-amino-1,2
PT   -benzisothiazole compounds.
XX
PS   Example 4; SEQ ID NO 5; 180pp; Japanese.
XX
CC   The invention comprises therapeutic agents for preventing or treating
CC   diseases associated with endothelial disorders, the agents contain a 3-
CC   amino-1,2-benzisothiazole compound. The therapeutic agents of the
CC   invention are useful for preventing/treating: diseases associated with
CC   endothelial disorders, toxaemia, severe toxaemia, toxic shock,
CC   haemorrhagic shock, alcohol induced cirrhosis, adult respiratory distress
CC   syndrome, chronic rheumatoid arthritis, ulcerative gastritis, Crohn's
CC   disease, glomerulonephritis, infectious carditis, systemic lupus
CC   erythematosus, scleroderma, Sjoegren's syndrome, multiple organ failure
CC   or autoimmune diseases (e.g. multiple sclerosis). The present DNA
CC   sequence represents a PCR primer that was used in the exemplification of
CC   the invention.
XX
SQ   Sequence 20 BP; 4 A; 8 C; 3 G; 5 T; 0 U; 0 Other;

  Query Match             0.5%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 73;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        501 CCCATCCAGAGTTTAGCCCT 520
              ||||||||||||||||||||
Db          1 CCCATCCAGAGTTTAGCCCT 20


RESULT 67
ADI53114
ID   ADI53114 standard; DNA; 20 BP.
XX
AC   ADI53114;
XX
DT   22-APR-2004  (first entry)
XX
DE   Human Toll-like receptor 4 TLR-4 RT-PCR primer #1.
XX
KW   ss; RT-PCR; reverse transcriptase; primer;
KW   myeloid differentiation factor 88; MyD88; atherosclerosis; thrombosis;
KW   restenosis; angina pectoris; ischaemia; stroke; heart attack;
KW   osteonecrosis; colitis; poor kidney function; congestive heart failure;
KW   poor blood circulation; slow wound healing; inflammation; infection;
KW   claudication; Toll-like receptor 4; TLR-4; human.
XX
OS   Homo sapiens.
XX
PN   US2003148986-A1.
XX
PD   07-AUG-2003.
XX
PF   12-DEC-2002; 2002US-00317992.
XX
PR   17-DEC-2001; 2001US-0341359P.
PR   23-APR-2002; 2002US-00128166.
XX
PA   (CEDA-) CEDARS SINAI MEDICAL CENT.
XX
PI   Arditi M,  Rajavashisth T,  Shah PK;
XX
DR   WPI; 2003-897598/82.
XX
PT   A system for inhibiting the biological activity of myeloid
PT   differentiation factor 88 (MyD88), useful for treating vascular diseases
PT   (e.g. atherosclerosis), comprises an intravascular device and MyD88
PT   inhibitor coated on the device.
XX
PS   Example 6; SEQ ID NO 3; 18pp; English.
XX
CC   The invention relates to a system for inhibiting the biological activity
CC   of myeloid differentiation factor 88 (MyD88) which comprises an
CC   intravascular device and a therapeutic composition coated upon the
CC   intravascular device, the composition comprising a MyD88 inhibitor. The
CC   system or method is useful for treating vascular diseases including
CC   atherosclerosis, transplant atherosclerosis, vein-graft atherosclerosis,
CC   thrombosis, restenosis, stent restenosis or angioplasty restenosis. It
CC   can be used for treating patients suffering from angina pectoris,
CC   ischaemias, conditions associated with ischaemias including stroke,
CC   transient ischaemic attacks, heart attack, osteonecrosis, colitis, poor
CC   kidney function or congestive heart failure, poor blood circulation to
CC   the extremities and complications of poor blood circulation including
CC   slow wound healing, inflammation, infections and claudication. The
CC   present sequence represents a human Toll-like receptor 4 TLR-4 reverse
CC   transcriptase (RT)-PCR primer.
XX
SQ   Sequence 20 BP; 5 A; 3 C; 4 G; 8 T; 0 U; 0 Other;

  Query Match             0.5%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 73;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1768 TGGATACGTTTCCTTATAAG 1787
              ||||||||||||||||||||
```

```
Db          1 TGGATACGTTTCCTTATAAG 20


RESULT 68
ACC83590/c
ID   ACC83590 standard; DNA; 20 BP.
XX
AC   ACC83590;
XX
DT   08-SEP-2003  (first entry)
XX
DE   Human Toll-like receptor 4 antisense oligonucleotide ISIS #114646.
XX
KW   Human; Toll-like receptor 4; receptor; antiinflammatory; immunomodulator;
KW   phosphorothioate; antisense; ss.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "OTHER = phosphorothioate nucleotides, the
FT                   oligonucleotide comprises a central gap region of 10 2'-
FT                   deoxynucleotides, flanked on both sites by 5-nucleotides
FT                   wings composed of 2'-methoxyethyl nucleotides"
FT   modified_base   1
FT                   /*tag=  b
FT                   /mod_base= m5c
FT   modified_base   2
FT                   /*tag=  c
FT                   /mod_base= m5c
FT   modified_base   4
FT                   /*tag=  d
FT                   /mod_base= m5c
FT   modified_base   7
FT                   /*tag=  e
FT                   /mod_base= m5c
FT   modified_base   11
FT                   /*tag=  f
FT                   /mod_base= m5c
FT   modified_base   13
FT                   /*tag=  g
FT                   /mod_base= m5c
FT   modified_base   14
FT                   /*tag=  h
FT                   /mod_base= m5c
FT   modified_base   18
FT                   /*tag=  i
FT                   /mod_base= m5c
XX
PN   WO2003044163-A2.
XX
PD   30-MAY-2003.
XX
PF   14-NOV-2002; 2002WO-US036390.
XX
PR   19-NOV-2001; 2001US-00001863.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Karras JG,  Koller E;
XX
DR   WPI; 2003-468766/44.
XX
PT   New antisense oligonucleotides for modulating Toll-like receptor 4 gene
PT   expression, particularly useful for preventing, delaying or treating e.g.
PT   inflammatory disorders, or conditions involving Th1 or Th2 immune
PT   responses.
XX
PS   Claim 3; Page 95; 110pp; English.
XX
CC   The present sequence is that of antisense oligonucleotide ISIS #114646.
CC   This chimeric phosphorothioate oligonucleotide, having 2'-MOE wings and a
CC   deoxy gap, is targeted to the coding region of human Toll-like receptor 4
CC   mRNA. It exhibits 85% inhibition of human Toll-like receptor 4 expression
CC   in THP-1 cells. It is useful for inhibiting the expression of Toll-like
CC   receptor 4 in cells or tissues. The oligonucleotide is particularly
CC   useful for treating or preventing a disease or condition associated with
CC   Toll-like receptor 4, e.g. an inflammatory disorder or a condition
CC   involving an immune response, particularly Th1 or Th2 responses
XX
SQ   Sequence 20 BP; 6 A; 8 C; 2 G; 4 T; 0 U; 0 Other;

  Query Match              0.5%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 73;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2354 CCGAAAGGTGATTGTTGTGG 2373
              ||||||||||||||||||||
Db         20 CCGAAAGGTGATTGTTGTGG 1


RESULT 69
ACC83594/c
ID   ACC83594 standard; DNA; 20 BP.
XX
AC   ACC83594;
XX
DT   08-SEP-2003  (first entry)
XX
DE   Human Toll-like receptor 4 antisense oligonucleotide ISIS #114650.
XX
KW   Human; Toll-like receptor 4; receptor; antiinflammatory; immunomodulator;
KW   phosphorothioate; antisense; ss.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "OTHER = phosphorothioate nucleotides, the
FT                   oligonucleotide comprises a central gap region of 10 2'-
FT                   deoxynucleotides, flanked on both sites by 5-nucleotides
FT                   wings composed of 2'-methoxyethyl nucleotides"
FT   modified_base   8
FT                   /*tag=  b
FT                   /mod_base= m5c
FT   modified_base   9
FT                   /*tag=  c
FT                   /mod_base= m5c
FT   modified_base   10
FT                   /*tag=  d
FT                   /mod_base= m5c
FT   modified_base   12
FT                   /*tag=  e
FT                   /mod_base= m5c
FT   modified_base   13
FT                   /*tag=  f
FT                   /mod_base= m5c
XX
PN   WO2003044163-A2.
XX
PD   30-MAY-2003.
XX
PF   14-NOV-2002; 2002WO-US036390.
XX
PR   19-NOV-2001; 2001US-00001863.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Karras JG,  Koller E;
XX
DR   WPI; 2003-468766/44.
XX
```

```
PT   New antisense oligonucleotides for modulating Toll-like receptor 4 gene
PT   expression, particularly useful for preventing, delaying or treating e.g.
PT   inflammatory disorders, or conditions involving Th1 or Th2 immune
PT   responses.
XX
PS   Claim 3; Page 95; 110pp; English.
XX
CC   The present sequence is that of antisense oligonucleotide ISIS #114650.
CC   This chimeric phosphorothioate oligonucleotide, having 2'-MOE wings and a
CC   deoxy gap, is targeted to the 3' untranslated region of human Toll-like
CC   receptor 4 mRNA. It exhibits 79% inhibition of human Toll-like receptor 4
CC   expression in THP-1 cells. It is useful for inhibiting the expression of
CC   Toll-like receptor 4 in cells or tissues. The oligonucleotide is
CC   particularly useful for treating or preventing a disease or condition
CC   associated with Toll-like receptor 4, e.g. an inflammatory disorder or a
CC   condition involving an immune response, particularly Th1 or Th2 responses
XX
SQ   Sequence 20 BP; 7 A; 5 C; 5 G; 3 T; 0 U; 0 Other;

  Query Match             0.5%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 73;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2884 TCTTCCAGGTGGGCATTTCA 2903
              ||||||||||||||||||||
Db         20 TCTTCCAGGTGGGCATTTCA 1


RESULT 70
ACC83606/c
ID   ACC83606 standard; DNA; 20 BP.
XX
AC   ACC83606;
XX
DT   08-SEP-2003  (first entry)
XX
DE   Human Toll-like receptor 4 antisense oligonucleotide ISIS #114629.
XX
KW   Human; Toll-like receptor 4; receptor; antiinflammatory; immunomodulator;
KW   phosphorothioate; antisense; ss.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   modified_base    1. .20
FT                    /*tag=  a
FT                    /mod_base= OTHER
FT                    /note= "OTHER = phosphorothioate nucleotides, the
FT                    oligonucleotide comprises a central gap region of 10 2'-
FT                    deoxynucleotides, flanked on both sites by 5-nucleotides
FT                    wings composed of 2'-methoxyethyl nucleotides"
FT   modified_base    1
FT                    /*tag=  b
FT                    /mod_base= m5c
FT   modified_base    4
FT                    /*tag=  c
FT                    /mod_base= m5c
FT   modified_base    7
FT                    /*tag=  d
FT                    /mod_base= m5c
FT   modified_base    14
FT                    /*tag=  e
FT                    /mod_base= m5c
XX
PN   WO2003044163-A2.
XX
PD   30-MAY-2003.
XX
PF   14-NOV-2002; 2002WO-US036390.
XX
PR   19-NOV-2001; 2001US-00001863.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Karras JG,  Koller E;
XX
DR   WPI; 2003-468766/44.
XX
PT   New antisense oligonucleotides for modulating Toll-like receptor 4 gene
PT   expression, particularly useful for preventing, delaying or treating e.g.
PT   inflammatory disorders, or conditions involving Th1 or Th2 immune
PT   responses.
XX
PS   Example 14; Page 95; 110pp; English.
XX
CC   The present sequence is that of antisense oligonucleotide ISIS #114629.
CC   This chimeric phosphorothioate oligonucleotide, having 2'-MOE wings and a
CC   deoxy gap, is targeted to the 5' untranslated region of human Toll-like
CC   receptor 4 mRNA. It exhibits 48% inhibition of human Toll-like receptor 4
CC   expression in THP-1 cells. It is useful for inhibiting the expression of
CC   Toll-like receptor 4 in cells or tissues. The oligonucleotide is
CC   particularly useful for treating or preventing a disease or condition
CC   associated with Toll-like receptor 4, e.g. an inflammatory disorder or a
CC   condition involving an immune response, particularly Th1 or Th2 responses
XX
SQ   Sequence 20 BP; 7 A; 4 C; 6 G; 3 T; 0 U; 0 Other;

  Query Match             0.5%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 73;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        225 CTTCTTGCTAAATGCTGCCG 244
              ||||||||||||||||||||
Db         20 CTTCTTGCTAAATGCTGCCG 1


RESULT 71
ACC83611/c
ID   ACC83611 standard; DNA; 20 BP.
XX
AC   ACC83611;
XX
DT   08-SEP-2003  (first entry)
XX
DE   Human Toll-like receptor 4 antisense oligonucleotide ISIS #114638.
XX
KW   Human; Toll-like receptor 4; receptor; antiinflammatory; immunomodulator;
KW   phosphorothioate; antisense; ss.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   modified_base    1. .20
FT                    /*tag=  a
FT                    /mod_base= OTHER
FT                    /note= "OTHER = phosphorothioate nucleotides, the
FT                    oligonucleotide comprises a central gap region of 10 2'-
FT                    deoxynucleotides, flanked on both sites by 5-nucleotides
FT                    wings composed of 2'-methoxyethyl nucleotides"
FT   modified_base    4
FT                    /*tag=  b
FT                    /mod_base= m5c
FT   modified_base    5
FT                    /*tag=  c
FT                    /mod_base= m5c
FT   modified_base    8
FT                    /*tag=  d
FT                    /mod_base= m5c
FT   modified_base    13
FT                    /*tag=  e
FT                    /mod_base= m5c
FT   modified_base    14
FT                    /*tag=  f
FT                    /mod_base= m5c
XX
PN   WO2003044163-A2.
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XX
PD   30-MAY-2003.
XX
PF   14-NOV-2002; 2002WO-US036390.
XX
PR   19-NOV-2001; 2001US-00001863.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Karras JG,  Koller E;
XX
DR   WPI; 2003-468766/44.
XX
PT   New antisense oligonucleotides for modulating Toll-like receptor 4 gene
PT   expression, particularly useful for preventing, delaying or treating e.g.
PT   inflammatory disorders, or conditions involving Th1 or Th2 immune
PT   responses.
XX
PS   Example 14; Page 95; 110pp; English.
XX
CC   The present sequence is that of antisense oligonucleotide ISIS #114638.
CC   This chimeric phosphorothioate oligonucleotide, having 2'-MOE wings and a
CC   deoxy gap, is targeted to the coding region of human Toll-like receptor 4
CC   mRNA. It exhibits 11% inhibition of human Toll-like receptor 4 expression
CC   in THP-1 cells. More active oligonucleotides are useful for inhibiting
CC   the expression of Toll-like receptor 4 in cells or tissues. The
CC   oligonucleotide is particularly useful for treating or preventing a
CC   disease or condition associated with Toll-like receptor 4, e.g. an
CC   inflammatory disorder or a condition involving an immune response,
CC   particularly Th1 or Th2 responses
XX
SQ   Sequence 20 BP; 5 A; 6 C; 3 G; 6 T; 0 U; 0 Other;

  Query Match             0.5%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 73;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1586 AGTCTTGAAAATGGCTGGCA 1605
              ||||||||||||||||||||
Db         20 AGTCTTGAAAATGGCTGGCA 1


RESULT 72
ACC83584/c
ID   ACC83584 standard; DNA; 20 BP.
XX
AC   ACC83584;
XX
DT   08-SEP-2003  (first entry)
XX
DE   Human Toll-like receptor 4 antisense oligonucleotide ISIS #114637.
XX
KW   Human; Toll-like receptor 4; receptor; antiinflammatory; immunomodulator;
KW   phosphorothioate; antisense; ss.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "OTHER = phosphorothioate nucleotides, the
FT                   oligonucleotide comprises a central gap region of 10 2'-
FT                   deoxynucleotides, flanked on both sites by 5-nucleotides
FT                   wings composed of 2'-methoxyethyl nucleotides"
FT   modified_base   2
FT                   /*tag=  c
FT                   /mod_base= m5c
FT   modified_base   4
FT                   /*tag=  b
FT                   /mod_base= m5c
FT   modified_base   14
FT                   /*tag=  d
FT                   /mod_base= m5c
FT   modified_base   18
FT                   /*tag=  e
FT                   /mod_base= m5c
FT   modified_base   19
FT                   /*tag=  f
FT                   /mod_base= m5c
FT   modified_base   20
FT                   /*tag=  g
FT                   /mod_base= m5c
XX
PN   WO2003044163-A2.
XX
PD   30-MAY-2003.
XX
PF   14-NOV-2002; 2002WO-US036390.
XX
PR   19-NOV-2001; 2001US-00001863.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Karras JG,  Koller E;
XX
DR   WPI; 2003-468766/44.
XX
PT   New antisense oligonucleotides for modulating Toll-like receptor 4 gene
PT   expression, particularly useful for preventing, delaying or treating e.g.
PT   inflammatory disorders, or conditions involving Th1 or Th2 immune
PT   responses.
XX
PS   Claim 3; Page 95; 110pp; English.
XX
CC   The present sequence is that of antisense oligonucleotide ISIS #114637.
CC   This chimeric phosphorothioate oligonucleotide, having 2'-MOE wings and a
CC   deoxy gap, is targeted to the coding region of human Toll-like receptor 4
CC   mRNA. It exhibits 77% inhibition of human Toll-like receptor 4 expression
CC   in THP-1 cells. It is useful for inhibiting the expression of Toll-like
CC   receptor 4 in cells or tissues. The oligonucleotide is particularly
CC   useful for treating or preventing a disease or condition associated with
CC   Toll-like receptor 4, e.g. an inflammatory disorder or a condition
CC   involving an immune response, particularly Th1 or Th2 responses
XX
SQ   Sequence 20 BP; 5 A; 6 C; 5 G; 4 T; 0 U; 0 Other;

  Query Match             0.5%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 73;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        998 GGGCCTGTGCAATTTGACCA 1017
              ||||||||||||||||||||
Db         20 GGGCCTGTGCAATTTGACCA 1


RESULT 73
ACC83583/c
ID   ACC83583 standard; DNA; 20 BP.
XX
AC   ACC83583;
XX
DT   08-SEP-2003  (first entry)
XX
DE   Human Toll-like receptor 4 antisense oligonucleotide ISIS #114633.
XX
KW   Human; Toll-like receptor 4; receptor; antiinflammatory; immunomodulator;
KW   phosphorothioate; antisense; ss.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "OTHER = phosphorothioate nucleotides, the
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FT                   oligonucleotide comprises a central gap region of 10 2'-
FT                   deoxynucleotides, flanked on both sites by 5-nucleotides
FT                   wings composed of 2'-methoxyethyl nucleotides"
FT   modified_base   1
FT                   /*tag=  b
FT                   /mod_base= m5c
FT   modified_base   2
FT                   /*tag=  c
FT                   /mod_base= m5c
FT   modified_base   11
FT                   /*tag=  d
FT                   /mod_base= m5c
FT   modified_base   13
FT                   /*tag=  e
FT                   /mod_base= m5c
FT   modified_base   14
FT                   /*tag=  f
FT                   /mod_base= m5c
FT   modified_base   15
FT                   /*tag=  g
FT                   /mod_base= m5c
FT   modified_base   20
FT                   /*tag=  e
FT                   /mod_base= m5c
XX
PN   WO2003044163-A2.
XX
PD   30-MAY-2003.
XX
PF   14-NOV-2002; 2002WO-US036390.
XX
PR   19-NOV-2001; 2001US-00001863.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Karras JG,  Koller E;
XX
DR   WPI; 2003-468766/44.
XX
PT   New antisense oligonucleotides for modulating Toll-like receptor 4 gene
PT   expression, particularly useful for preventing, delaying or treating e.g.
PT   inflammatory disorders, or conditions involving Th1 or Th2 immune
PT   responses.
XX
PS   Claim 3; Page 95; 110pp; English.
XX
CC   The present sequence is that of antisense oligonucleotide ISIS #114633.
CC   This chimeric phosphorothioate oligonucleotide, having 2'-MOE wings and a
CC   deoxy gap, is targeted to the coding region of human Toll-like receptor 4
CC   mRNA. It exhibits 69% inhibition of human Toll-like receptor 4 expression
CC   in THP-1 cells. It is useful for inhibiting the expression of Toll-like
CC   receptor 4 in cells or tissues. The oligonucleotide is particularly
CC   useful for treating or preventing a disease or condition associated with
CC   Toll-like receptor 4, e.g. an inflammatory disorder or a condition
CC   involving an immune response, particularly Th1 or Th2 responses
XX
SQ   Sequence 20 BP; 6 A; 7 C; 6 G; 1 T; 0 U; 0 Other;

  Query Match              0.5%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 73;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        516 GCCCTGGGAGCCTTTTCTGG 535
              ||||||||||||||||||||
Db         20 GCCCTGGGAGCCTTTTCTGG 1


RESULT 74
ACC83592/c
ID   ACC83592 standard; DNA; 20 BP.
XX
AC   ACC83592;
XX
DT   08-SEP-2003  (first entry)
XX
DE   Human Toll-like receptor 4 antisense oligonucleotide ISIS #114648.
XX
KW   Human; Toll-like receptor 4; receptor; antiinflammatory; immunomodulator;
KW   phosphorothioate; antisense; ss.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "OTHER = phosphorothioate nucleotides, the
FT                   oligonucleotide comprises a central gap region of 10 2'-
FT                   deoxynucleotides, flanked on both sites by 5-nucleotides
FT                   wings composed of 2'-methoxyethyl nucleotides"
FT   modified_base   1
FT                   /*tag=  b
FT                   /mod_base= m5c
FT   modified_base   3
FT                   /*tag=  c
FT                   /mod_base= m5c
FT   modified_base   4
FT                   /*tag=  d
FT                   /mod_base= m5c
FT   modified_base   15
FT                   /*tag=  e
FT                   /mod_base= m5c
FT   modified_base   16
FT                   /*tag=  f
FT                   /mod_base= m5c
FT   modified_base   18
FT                   /*tag=  g
FT                   /mod_base= m5c
FT   modified_base   19
FT                   /*tag=  h
FT                   /mod_base= m5c
FT   modified_base   20
FT                   /*tag=  i
FT                   /mod_base= m5c
XX
PN   WO2003044163-A2.
XX
PD   30-MAY-2003.
XX
PF   14-NOV-2002; 2002WO-US036390.
XX
PR   19-NOV-2001; 2001US-00001863.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Karras JG,  Koller E;
XX
DR   WPI; 2003-468766/44.
XX
PT   New antisense oligonucleotides for modulating Toll-like receptor 4 gene
PT   expression, particularly useful for preventing, delaying or treating e.g.
PT   inflammatory disorders, or conditions involving Th1 or Th2 immune
PT   responses.
XX
PS   Claim 3; Page 95; 110pp; English.
XX
CC   The present sequence is that of antisense oligonucleotide ISIS #114648.
CC   This chimeric phosphorothioate oligonucleotide, having 2'-MOE wings and a
CC   deoxy gap, is targeted to the coding region of human Toll-like receptor 4
CC   mRNA. It exhibits 73% inhibition of human Toll-like receptor 4 expression
CC   in THP-1 cells. It is useful for inhibiting the expression of Toll-like
CC   receptor 4 in cells or tissues. The oligonucleotide is particularly
CC   useful for treating or preventing a disease or condition associated with
CC   Toll-like receptor 4, e.g. an inflammatory disorder or a condition
CC   involving an immune response, particularly Th1 or Th2 responses
XX
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```
SQ   Sequence 20 BP; 4 A; 8 C; 5 G; 3 T; 0 U; 0 Other;

  Query Match             0.5%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 73;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2571 GGGCGGCACATCTTCTGGAG 2590
              ||||||||||||||||||||
Db         20 GGGCGGCACATCTTCTGGAG 1


RESULT 75
ACC83605/c
ID   ACC83605 standard; DNA; 20 BP.
XX
AC   ACC83605;
XX
DT   08-SEP-2003  (first entry)
XX
DE   Human Toll-like receptor 4 antisense oligonucleotide ISIS #114628.
XX
KW   Human; Toll-like receptor 4; receptor; antiinflammatory; immunomodulator;
KW   phosphorothioate; antisense; ss.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   modified_base    1. .20
FT                    /*tag=  a
FT                    /mod_base= OTHER
FT                    /note= "OTHER = phosphorothioate nucleotides, the
FT                    oligonucleotide comprises a central gap region of 10 2'-
FT                    deoxynucleotides, flanked on both sites by 5-nucleotides
FT                    wings composed of 2'-methoxyethyl nucleotides"
FT   modified_base    11
FT                    /*tag=  b
FT                    /mod_base= m5c
FT   modified_base    16
FT                    /*tag=  c
FT                    /mod_base= m5c
FT   modified_base    18
FT                    /*tag=  d
FT                    /mod_base= m5c
FT   modified_base    19
FT                    /*tag=  e
FT                    /mod_base= m5c
XX
PN   WO2003044163-A2.
XX
PD   30-MAY-2003.
XX
PF   14-NOV-2002; 2002WO-US036390.
XX
PR   19-NOV-2001; 2001US-00001863.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Karras JG,  Koller E;
XX
DR   WPI; 2003-468766/44.
XX
PT   New antisense oligonucleotides for modulating Toll-like receptor 4 gene
PT   expression, particularly useful for preventing, delaying or treating e.g.
PT   inflammatory disorders, or conditions involving Th1 or Th2 immune
PT   responses.
XX
PS   Example 14; Page 95; 110pp; English.
XX
CC   The present sequence is that of antisense oligonucleotide ISIS #114628.
CC   This chimeric phosphorothioate oligonucleotide, having 2'-MOE wings and a
CC   deoxy gap, is targeted to the 5' untranslated region of human Toll-like
CC   receptor 4 mRNA. It exhibits 32% inhibition of human Toll-like receptor 4
CC   expression in THP-1 cells. It is useful for inhibiting the expression of
CC   Toll-like receptor 4 in cells or tissues. The oligonucleotide is
CC   particularly useful for treating or preventing a disease or condition
CC   associated with Toll-like receptor 4, e.g. an inflammatory disorder or a
CC   condition involving an immune response, particularly Th1 or Th2 responses
XX
SQ   Sequence 20 BP; 3 A; 4 C; 10 G; 3 T; 0 U; 0 Other;

  Query Match             0.5%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 73;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        193 CGGAGCCTCAGCCCTTCACC 212
              ||||||||||||||||||||
Db         20 CGGAGCCTCAGCCCTTCACC 1


RESULT 76
ACC83608/c
ID   ACC83608 standard; DNA; 20 BP.
XX
AC   ACC83608;
XX
DT   08-SEP-2003  (first entry)
XX
DE   Human Toll-like receptor 4 antisense oligonucleotide ISIS #114634.
XX
KW   Human; Toll-like receptor 4; receptor; antiinflammatory; immunomodulator;
KW   phosphorothioate; antisense; ss.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   modified_base    1. .20
FT                    /*tag=  a
FT                    /mod_base= OTHER
FT                    /note= "OTHER = phosphorothioate nucleotides, the
FT                    oligonucleotide comprises a central gap region of 10 2'-
FT                    deoxynucleotides, flanked on both sites by 5-nucleotides
FT                    wings composed of 2'-methoxyethyl nucleotides"
FT   modified_base    9
FT                    /*tag=  b
FT                    /mod_base= m5c
FT   modified_base    12
FT                    /*tag=  c
FT                    /mod_base= m5c
FT   modified_base    14
FT                    /*tag=  d
FT                    /mod_base= m5c
FT   modified_base    15
FT                    /*tag=  e
FT                    /mod_base= m5c
FT   modified_base    19
FT                    /*tag=  f
FT                    /mod_base= m5c
XX
PN   WO2003044163-A2.
XX
PD   30-MAY-2003.
XX
PF   14-NOV-2002; 2002WO-US036390.
XX
PR   19-NOV-2001; 2001US-00001863.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Karras JG,  Koller E;
XX
DR   WPI; 2003-468766/44.
XX
PT   New antisense oligonucleotides for modulating Toll-like receptor 4 gene
PT   expression, particularly useful for preventing, delaying or treating e.g.
PT   inflammatory disorders, or conditions involving Th1 or Th2 immune
PT   responses.
```

```
XX
PS   Example 14; Page 95; 110pp; English.
XX
CC   The present sequence is that of antisense oligonucleotide ISIS #114634.
CC   This chimeric phosphorothioate oligonucleotide, having 2'-MOE wings and a
CC   deoxy gap, is targeted to the coding region of human Toll-like receptor 4
CC   mRNA. It exhibits 55% inhibition of human Toll-like receptor 4 expression
CC   in THP-1 cells. Such oligonucleotides are useful for inhibiting the
CC   expression of Toll-like receptor 4 in cells or tissues. The
CC   oligonucleotide is particularly useful for treating or preventing a
CC   disease or condition associated with Toll-like receptor 4, e.g. an
CC   inflammatory disorder or a condition involving an immune response,
CC   particularly Th1 or Th2 responses
XX
SQ   Sequence 20 BP; 6 A; 6 C; 6 G; 2 T; 0 U; 0 Other;

  Query Match             0.5%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 73;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        518 CCTGGGAGCCTTTTCTGGAC 537
              ||||||||||||||||||||
Db         20 CCTGGGAGCCTTTTCTGGAC 1


RESULT 77
ACC83609/c
ID   ACC83609 standard; DNA; 20 BP.
XX
AC   ACC83609;
XX
DT   08-SEP-2003  (first entry)
XX
DE   Human Toll-like receptor 4 antisense oligonucleotide ISIS #114635.
XX
KW   Human; Toll-like receptor 4; receptor; antiinflammatory; immunomodulator;
KW   phosphorothioate; antisense; ss.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   modified_base    1. .20
FT                    /*tag=  a
FT                    /mod_base= OTHER
FT                    /note= "OTHER = phosphorothioate nucleotides, the
FT                    oligonucleotide comprises a central gap region of 10 2'-
FT                    deoxynucleotides, flanked on both sites by 5-nucleotides
FT                    wings composed of 2'-methoxyethyl nucleotides"
FT   modified_base    2
FT                    /*tag=  b
FT                    /mod_base= m5c
FT   modified_base    11
FT                    /*tag=  c
FT                    /mod_base= m5c
FT   modified_base    17
FT                    /*tag=  d
FT                    /mod_base= m5c
XX
PN   WO2003044163-A2.
XX
PD   30-MAY-2003.
XX
PF   14-NOV-2002; 2002WO-US036390.
XX
PR   19-NOV-2001; 2001US-00001863.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Karras JG,  Koller E;
XX
DR   WPI; 2003-468766/44.
XX
PT   New antisense oligonucleotides for modulating Toll-like receptor 4 gene
PT   expression, particularly useful for preventing, delaying or treating e.g.
PT   inflammatory disorders, or conditions involving Th1 or Th2 immune
PT   responses.
XX
PS   Example 14; Page 95; 110pp; English.
XX
CC   The present sequence is that of antisense oligonucleotide ISIS #114635.
CC   This chimeric phosphorothioate oligonucleotide, having 2'-MOE wings and a
CC   deoxy gap, is targeted to the coding region of human Toll-like receptor 4
CC   mRNA. It exhibits 51% inhibition of human Toll-like receptor 4 expression
CC   in THP-1 cells. Such oligonucleotides are useful for inhibiting the
CC   expression of Toll-like receptor 4 in cells or tissues. The
CC   oligonucleotide is particularly useful for treating or preventing a
CC   disease or condition associated with Toll-like receptor 4, e.g. an
CC   inflammatory disorder or a condition involving an immune response,
CC   particularly Th1 or Th2 responses
XX
SQ   Sequence 20 BP; 5 A; 3 C; 8 G; 4 T; 0 U; 0 Other;

  Query Match             0.5%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 73;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        791 CCTGTCCCTGAACCCTATGA 810
              ||||||||||||||||||||
Db         20 CCTGTCCCTGAACCCTATGA 1


RESULT 78
ACC83596/c
ID   ACC83596 standard; DNA; 20 BP.
XX
AC   ACC83596;
XX
DT   08-SEP-2003  (first entry)
XX
DE   Human Toll-like receptor 4 antisense oligonucleotide ISIS #114652.
XX
KW   Human; Toll-like receptor 4; receptor; antiinflammatory; immunomodulator;
KW   phosphorothioate; antisense; ss.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   modified_base    1. .20
FT                    /*tag=  a
FT                    /mod_base= OTHER
FT                    /note= "OTHER = phosphorothioate nucleotides, the
FT                    oligonucleotide comprises a central gap region of 10 2'-
FT                    deoxynucleotides, flanked on both sites by 5-nucleotides
FT                    wings composed of 2'-methoxyethyl nucleotides"
FT   modified_base    1
FT                    /*tag=  b
FT                    /mod_base= m5c
FT   modified_base    4
FT                    /*tag=  c
FT                    /mod_base= m5c
FT   modified_base    8
FT                    /*tag=  d
FT                    /mod_base= m5c
FT   modified_base    11
FT                    /*tag=  e
FT                    /mod_base= m5c
FT   modified_base    17
FT                    /*tag=  f
FT                    /mod_base= m5c
FT   modified_base    18
FT                    /*tag=  g
FT                    /mod_base= m5c
FT   modified_base    19
FT                    /*tag=  h
FT                    /mod_base= m5c
FT   modified_base    20
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FT                   /*tag=  i
FT                   /mod_base= m5c
XX
PN   WO2003044163-A2.
XX
PD   30-MAY-2003.
XX
PF   14-NOV-2002; 2002WO-US036390.
XX
PR   19-NOV-2001; 2001US-00001863.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Karras JG,  Koller E;
XX
DR   WPI; 2003-468766/44.
XX
PT   New antisense oligonucleotides for modulating Toll-like receptor 4 gene
PT   expression, particularly useful for preventing, delaying or treating e.g.
PT   inflammatory disorders, or conditions involving Th1 or Th2 immune
PT   responses.
XX
PS   Claim 3; Page 95; 110pp; English.
XX
CC   The present sequence is that of antisense oligonucleotide ISIS #114652.
CC   This chimeric phosphorothioate oligonucleotide, having 2'-MOE wings and a
CC   deoxy gap, is targeted to the 3' untranslated region of human Toll-like
CC   receptor 4 mRNA. It exhibits 85% inhibition of human Toll-like receptor 4
CC   expression in THP-1 cells. It is useful for inhibiting the expression of
CC   Toll-like receptor 4 in cells or tissues. The oligonucleotide is
CC   particularly useful for treating or preventing a disease or condition
CC   associated with Toll-like receptor 4, e.g. an inflammatory disorder or a
CC   condition involving an immune response, particularly Th1 or Th2 responses
XX
SQ   Sequence 20 BP; 4 A; 8 C; 4 G; 4 T; 0 U; 0 Other;

  Query Match             0.5%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 73;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       3144 GGGGCTCCTGATGCAAGATG 3163
              ||||||||||||||||||||
Db         20 GGGGCTCCTGATGCAAGATG 1


RESULT 79
ACC83603/c
ID   ACC83603 standard; DNA; 20 BP.
XX
AC   ACC83603;
XX
DT   08-SEP-2003  (first entry)
XX
DE   Human Toll-like receptor 4 antisense oligonucleotide ISIS #114626.
XX
KW   Human; Toll-like receptor 4; receptor; antiinflammatory; immunomodulator;
KW   phosphorothioate; antisense; ss.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   modified_base    1. .20
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "OTHER = phosphorothioate nucleotides, the
FT                   oligonucleotide comprises a central gap region of 10 2'-
FT                   deoxynucleotides, flanked on both sites by 5-nucleotides
FT                   wings composed of 2'-methoxyethyl nucleotides"
FT   modified_base    3
FT                   /*tag=  b
FT                   /mod_base= m5c
FT   modified_base    9
FT                   /*tag=  c
FT                   /mod_base= m5c
FT   modified_base    10
FT                   /*tag=  d
FT                   /mod_base= m5c
FT   modified_base    11
FT                   /*tag=  e
FT                   /mod_base= m5c
FT   modified_base    14
FT                   /*tag=  f
FT                   /mod_base= m5c
FT   modified_base    15
FT                   /*tag=  g
FT                   /mod_base= m5c
FT   modified_base    19
FT                   /*tag=  h
FT                   /mod_base= m5c
XX
PN   WO2003044163-A2.
XX
PD   30-MAY-2003.
XX
PF   14-NOV-2002; 2002WO-US036390.
XX
PR   19-NOV-2001; 2001US-00001863.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Karras JG,  Koller E;
XX
DR   WPI; 2003-468766/44.
XX
PT   New antisense oligonucleotides for modulating Toll-like receptor 4 gene
PT   expression, particularly useful for preventing, delaying or treating e.g.
PT   inflammatory disorders, or conditions involving Th1 or Th2 immune
PT   responses.
XX
PS   Example 14; Page 95; 110pp; English.
XX
CC   The present sequence is that of antisense oligonucleotide ISIS #114626.
CC   This chimeric phosphorothioate oligonucleotide, having 2'-MOE wings and a
CC   deoxy gap, is targeted to the 5' untranslated region of human Toll-like
CC   receptor 4 mRNA. It exhibits 35% inhibition of human Toll-like receptor 4
CC   expression in THP-1 cells. It is useful for inhibiting the expression of
CC   Toll-like receptor 4 in cells or tissues. The oligonucleotide is
CC   particularly useful for treating or preventing a disease or condition
CC   associated with Toll-like receptor 4, e.g. an inflammatory disorder or a
CC   condition involving an immune response, particularly Th1 or Th2 responses
XX
SQ   Sequence 20 BP; 5 A; 7 C; 6 G; 2 T; 0 U; 0 Other;

  Query Match             0.5%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 73;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy         60 CGCCTGGCTGGGACTCTGAT 79
              ||||||||||||||||||||
Db         20 CGCCTGGCTGGGACTCTGAT 1


RESULT 80
ACC83588/c
ID   ACC83588 standard; DNA; 20 BP.
XX
AC   ACC83588;
XX
DT   08-SEP-2003  (first entry)
XX
DE   Human Toll-like receptor 4 antisense oligonucleotide ISIS #114643.
XX
KW   Human; Toll-like receptor 4; receptor; antiinflammatory; immunomodulator;
KW   phosphorothioate; antisense; ss.
XX
OS   Homo sapiens.
```

```
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "OTHER = phosphorothioate nucleotides, the
FT                   oligonucleotide comprises a central gap region of 10 2'-
FT                   deoxynucleotides, flanked on both sites by 5-nucleotides
FT                   wings composed of 2'-methoxyethyl nucleotides"
FT   modified_base   2
FT                   /*tag=  b
FT                   /mod_base= m5c
FT   modified_base   5
FT                   /*tag=  c
FT                   /mod_base= m5c
FT   modified_base   6
FT                   /*tag=  d
FT                   /mod_base= m5c
FT   modified_base   9
FT                   /*tag=  e
FT                   /mod_base= m5c
FT   modified_base   16
FT                   /*tag=  f
FT                   /mod_base= m5c
FT   modified_base   19
FT                   /*tag=  g
FT                   /mod_base= m5c
XX
PN   WO2003044163-A2.
XX
PD   30-MAY-2003.
XX
PF   14-NOV-2002; 2002WO-US036390.
XX
PR   19-NOV-2001; 2001US-00001863.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Karras JG,  Koller E;
XX
DR   WPI; 2003-468766/44.
XX
PT   New antisense oligonucleotides for modulating Toll-like receptor 4 gene
PT   expression, particularly useful for preventing, delaying or treating e.g.
PT   inflammatory disorders, or conditions involving Th1 or Th2 immune
PT   responses.
XX
PS   Claim 3; Page 95; 110pp; English.
XX
CC   The present sequence is that of antisense oligonucleotide ISIS #114643.
CC   This chimeric phosphorothioate oligonucleotide, having 2'-MOE wings and a
CC   deoxy gap, is targeted to the coding region of human Toll-like receptor 4
CC   mRNA. It exhibits 86% inhibition of human Toll-like receptor 4 expression
CC   in THP-1 cells. It is useful for inhibiting the expression of Toll-like
CC   receptor 4 in cells or tissues. The oligonucleotide is particularly
CC   useful for treating or preventing a disease or condition associated with
CC   Toll-like receptor 4, e.g. an inflammatory disorder or a condition
CC   involving an immune response, particularly Th1 or Th2 responses
XX
SQ   Sequence 20 BP; 8 A; 6 C; 5 G; 1 T; 0 U; 0 Other;

  Query Match              0.5%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 73;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2137 TGATGCTTCTTGCTGGCTGC 2156
             ||||||||||||||||||||
Db         20 TGATGCTTCTTGCTGGCTGC 1


RESULT 81
ACC83597/c
ID   ACC83597 standard; DNA; 20 BP.
XX
AC   ACC83597;
XX
DT   08-SEP-2003  (first entry)
XX
DE   Human Toll-like receptor 4 antisense oligonucleotide ISIS #114653.
XX
KW   Human; Toll-like receptor 4; receptor; antiinflammatory; immunomodulator;
KW   phosphorothioate; antisense; ss.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "OTHER = phosphorothioate nucleotides, the
FT                   oligonucleotide comprises a central gap region of 10 2'-
FT                   deoxynucleotides, flanked on both sites by 5-nucleotides
FT                   wings composed of 2'-methoxyethyl nucleotides"
FT   modified_base   7
FT                   /*tag=  b
FT                   /mod_base= m5c
FT   modified_base   8
FT                   /*tag=  c
FT                   /mod_base= m5c
FT   modified_base   9
FT                   /*tag=  d
FT                   /mod_base= m5c
FT   modified_base   10
FT                   /*tag=  e
FT                   /mod_base= m5c
FT   modified_base   11
FT                   /*tag=  f
FT                   /mod_base= m5c
FT   modified_base   18
FT                   /*tag=  g
FT                   /mod_base= m5c
XX
PN   WO2003044163-A2.
XX
PD   30-MAY-2003.
XX
PF   14-NOV-2002; 2002WO-US036390.
XX
PR   19-NOV-2001; 2001US-00001863.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Karras JG,  Koller E;
XX
DR   WPI; 2003-468766/44.
XX
PT   New antisense oligonucleotides for modulating Toll-like receptor 4 gene
PT   expression, particularly useful for preventing, delaying or treating e.g.
PT   inflammatory disorders, or conditions involving Th1 or Th2 immune
PT   responses.
XX
PS   Claim 3; Page 95; 110pp; English.
XX
CC   The present sequence is that of antisense oligonucleotide ISIS #114653.
CC   This chimeric phosphorothioate oligonucleotide, having 2'-MOE wings and a
CC   deoxy gap, is targeted to the 3' untranslated region of human Toll-like
CC   receptor 4 mRNA. It exhibits 72% inhibition of human Toll-like receptor 4
CC   expression in THP-1 cells. It is useful for inhibiting the expression of
CC   Toll-like receptor 4 in cells or tissues. The oligonucleotide is
CC   particularly useful for treating or preventing a disease or condition
CC   associated with Toll-like receptor 4, e.g. an inflammatory disorder or a
CC   condition involving an immune response, particularly Th1 or Th2 responses
XX
SQ   Sequence 20 BP; 7 A; 6 C; 3 G; 4 T; 0 U; 0 Other;

  Query Match              0.5%;  Score 20;  DB 1;  Length 20;
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```
  Best Local Similarity   100.0%;  Pred. No. 73;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       3521 TTGTTTAAAGGGGGCACTCT 3540
              ||||||||||||||||||||
Db         20 TTGTTTAAAGGGGGCACTCT 1


RESULT 82
ACC83602/c
ID   ACC83602 standard; DNA; 20 BP.
XX
AC   ACC83602;
XX
DT   08-SEP-2003  (first entry)
XX
DE   Human Toll-like receptor 4 antisense oligonucleotide ISIS #114625.
XX
KW   Human; Toll-like receptor 4; receptor; antiinflammatory; immunomodulator;
KW   phosphorothioate; antisense; ss.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "OTHER = phosphorothioate nucleotides, the
FT                   oligonucleotide comprises a central gap region of 10 2'-
FT                   deoxynucleotides, flanked on both sites by 5-nucleotides
FT                   wings composed of 2'-methoxyethyl nucleotides"
FT   modified_base   6
FT                   /*tag=  b
FT                   /mod_base= m5c
FT   modified_base   7
FT                   /*tag=  c
FT                   /mod_base= m5c
FT   modified_base   8
FT                   /*tag=  d
FT                   /mod_base= m5c
FT   modified_base   11
FT                   /*tag=  e
FT                   /mod_base= m5c
FT   modified_base   12
FT                   /*tag=  f
FT                   /mod_base= m5c
FT   modified_base   16
FT                   /*tag=  g
FT                   /mod_base= m5c
FT   modified_base   18
FT                   /*tag=  h
FT                   /mod_base= m5c
XX
PN   WO2003044163-A2.
XX
PD   30-MAY-2003.
XX
PF   14-NOV-2002; 2002WO-US036390.
XX
PR   19-NOV-2001; 2001US-00001863.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Karras JG,  Koller E;
XX
DR   WPI; 2003-468766/44.
XX
PT   New antisense oligonucleotides for modulating Toll-like receptor 4 gene
PT   expression, particularly useful for preventing, delaying or treating e.g.
PT   inflammatory disorders, or conditions involving Th1 or Th2 immune
PT   responses.
XX
PS   Example 14; Page 95; 110pp; English.
XX
CC   The present sequence is that of antisense oligonucleotide ISIS #114625.
CC   This chimeric phosphorothioate oligonucleotide, having 2'-MOE wings and a
CC   deoxy gap, is targeted to the 5' untranslated region of human Toll-like
CC   receptor 4 mRNA. It exhibits 47% inhibition of human Toll-like receptor 4
CC   expression in THP-1 cells. It is useful for inhibiting the expression of
CC   Toll-like receptor 4 in cells or tissues. The oligonucleotide is
CC   particularly useful for treating or preventing a disease or condition
CC   associated with Toll-like receptor 4, e.g. an inflammatory disorder or a
CC   condition involving an immune response, particularly Th1 or Th2 responses
XX
SQ   Sequence 20 BP; 5 A; 7 C; 7 G; 1 T; 0 U; 0 Other;

  Query Match             0.5%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 73;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy         57 TCGCGCCTGGCTGGGACTCT 76
              ||||||||||||||||||||
Db         20 TCGCGCCTGGCTGGGACTCT 1


RESULT 83
ACC83604/c
ID   ACC83604 standard; DNA; 20 BP.
XX
AC   ACC83604;
XX
DT   08-SEP-2003  (first entry)
XX
DE   Human Toll-like receptor 4 antisense oligonucleotide ISIS #114627.
XX
KW   Human; Toll-like receptor 4; receptor; antiinflammatory; immunomodulator;
KW   phosphorothioate; antisense; ss.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "OTHER = phosphorothioate nucleotides, the
FT                   oligonucleotide comprises a central gap region of 10 2'-
FT                   deoxynucleotides, flanked on both sites by 5-nucleotides
FT                   wings composed of 2'-methoxyethyl nucleotides"
FT   modified_base   5
FT                   /*tag=  b
FT                   /mod_base= m5c
FT   modified_base   6
FT                   /*tag=  c
FT                   /mod_base= m5c
FT   modified_base   11
FT                   /*tag=  d
FT                   /mod_base= m5c
FT   modified_base   13
FT                   /*tag=  e
FT                   /mod_base= m5c
FT   modified_base   14
FT                   /*tag=  f
FT                   /mod_base= m5c
FT   modified_base   16
FT                   /*tag=  g
FT                   /mod_base= m5c
FT   modified_base   18
FT                   /*tag=  h
FT                   /mod_base= m5c
XX
PN   WO2003044163-A2.
XX
PD   30-MAY-2003.
XX
PF   14-NOV-2002; 2002WO-US036390.
XX
```

PR 19-NOV-2001; 2001US-00001863.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Karras JG, Koller E;
XX
DR WPI; 2003-468766/44.
XX
PT New antisense oligonucleotides for modulating Toll-like receptor 4 gene
PT expression, particularly useful for preventing, delaying or treating e.g.
PT inflammatory disorders, or conditions involving Th1 or Th2 immune
PT responses.
XX
PS Example 14; Page 95; 110pp; English.
XX
CC The present sequence is that of antisense oligonucleotide ISIS #114627.
CC This chimeric phosphorothioate oligonucleotide, having 2'-MOE wings and a
CC deoxy gap, is targeted to the 5' untranslated region of human Toll-like
CC receptor 4 mRNA. It exhibits 30% inhibition of human Toll-like receptor 4
CC expression in THP-1 cells. It is useful for inhibiting the expression of
CC Toll-like receptor 4 in cells or tissues. The oligonucleotide is
CC particularly useful for treating or preventing a disease or condition
CC associated with Toll-like receptor 4, e.g. an inflammatory disorder or a
CC condition involving an immune response, particularly Th1 or Th2 responses
XX
SQ Sequence 20 BP; 5 A; 7 C; 6 G; 2 T; 0 U; 0 Other;

Query Match 0.5%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 73;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 128 CTGCGTGGAGACTTGGCCCT 147
||||||||||||||||||||
Db 20 CTGCGTGGAGACTTGGCCCT 1

RESULT 84
ACC83581/c
ID ACC83581 standard; DNA; 20 BP.
XX
AC ACC83581;
XX
DT 08-SEP-2003 (first entry)
XX
DE Human Toll-like receptor 4 antisense oligonucleotide ISIS #114631.
XX
KW Human; Toll-like receptor 4; receptor; antiinflammatory; immunomodulator;
KW phosphorothioate; antisense; ss.
XX
OS Homo sapiens.
XX
FH Key Location/Qualifiers
FT modified_base 1. .20
FT /*tag= a
FT /mod_base= OTHER
FT /note= "OTHER = phosphorothioate nucleotides, the
FT oligonucleotide comprises a central gap region of 10 2'-
FT deoxynucleotides, flanked on both sites by 5-nucleotides
FT wings composed of 2'-methoxyethyl nucleotides"
FT modified_base 4
FT /*tag= b
FT /mod_base= m5c
FT modified_base 10
FT /*tag= c
FT /mod_base= m5c
FT modified_base 12
FT /*tag= d
FT /mod_base= m5c
FT modified_base 20
FT /*tag= e
FT /mod_base= m5c
XX
PN WO2003044163-A2.
XX
PD 30-MAY-2003.
XX
PF 14-NOV-2002; 2002WO-US036390.
XX
PR 19-NOV-2001; 2001US-00001863.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Karras JG, Koller E;
XX
DR WPI; 2003-468766/44.
XX
PT New antisense oligonucleotides for modulating Toll-like receptor 4 gene
PT expression, particularly useful for preventing, delaying or treating e.g.
PT inflammatory disorders, or conditions involving Th1 or Th2 immune
PT responses.
XX
PS Claim 3; Page 95; 110pp; English.
XX
CC The present sequence is that of antisense oligonucleotide ISIS #114631.
CC This chimeric phosphorothioate oligonucleotide, having 2'-MOE wings and a
CC deoxy gap, is targeted to the coding region of human Toll-like receptor 4
CC mRNA. It exhibits 73% inhibition of human Toll-like receptor 4 expression
CC in THP-1 cells. It is useful for inhibiting the expression of Toll-like
CC receptor 4 in cells or tissues. The oligonucleotide is particularly
CC useful for treating or preventing a disease or condition associated with
CC Toll-like receptor 4, e.g. an inflammatory disorder or a condition
CC involving an immune response, particularly Th1 or Th2 responses
XX
SQ Sequence 20 BP; 3 A; 4 C; 6 G; 7 T; 0 U; 0 Other;

Query Match 0.5%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 73;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 453 GCATATCAGAGCCTAAGCCA 472
||||||||||||||||||||
Db 20 GCATATCAGAGCCTAAGCCA 1

RESULT 85
ACC83589/c
ID ACC83589 standard; DNA; 20 BP.
XX
AC ACC83589;
XX
DT 08-SEP-2003 (first entry)
XX
DE Human Toll-like receptor 4 antisense oligonucleotide ISIS #114644.
XX
KW Human; Toll-like receptor 4; receptor; antiinflammatory; immunomodulator;
KW phosphorothioate; antisense; ss.
XX
OS Homo sapiens.
XX
FH Key Location/Qualifiers
FT modified_base 1. .20
FT /*tag= a
FT /mod_base= OTHER
FT /note= "OTHER = phosphorothioate nucleotides, the
FT oligonucleotide comprises a central gap region of 10 2'-
FT deoxynucleotides, flanked on both sites by 5-nucleotides
FT wings composed of 2'-methoxyethyl nucleotides"
FT modified_base 3
FT /*tag= b
FT /mod_base= m5c
FT modified_base 15
FT /*tag= c
FT /mod_base= m5c
FT modified_base 17
FT /*tag= d
FT /mod_base= m5c

```
FT   modified_base   18
FT                   /*tag=  e
FT                   /mod_base= m5c
FT   modified_base   19
FT                   /*tag=  f
FT                   /mod_base= m5c
FT   modified_base   20
FT                   /*tag=  g
FT                   /mod_base= m5c
XX
PN   WO2003044163-A2.
XX
PD   30-MAY-2003.
XX
PF   14-NOV-2002; 2002WO-US036390.
XX
PR   19-NOV-2001; 2001US-00001863.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Karras JG,  Koller E;
XX
DR   WPI; 2003-468766/44.
XX
PT   New antisense oligonucleotides for modulating Toll-like receptor 4 gene
PT   expression, particularly useful for preventing, delaying or treating e.g.
PT   inflammatory disorders, or conditions involving Th1 or Th2 immune
PT   responses.
XX
PS   Claim 3; Page 95; 110pp; English.
XX
CC   The present sequence is that of antisense oligonucleotide ISIS #114644.
CC   This chimeric phosphorothioate oligonucleotide, having 2'-MOE wings and a
CC   deoxy gap, is targeted to the coding region of human Toll-like receptor 4
CC   mRNA. It exhibits 72% inhibition of human Toll-like receptor 4 expression
CC   in THP-1 cells. It is useful for inhibiting the expression of Toll-like
CC   receptor 4 in cells or tissues. The oligonucleotide is particularly
CC   useful for treating or preventing a disease or condition associated with
CC   Toll-like receptor 4, e.g. an inflammatory disorder or a condition
CC   involving an immune response, particularly Th1 or Th2 responses
XX
SQ   Sequence 20 BP; 6 A; 6 C; 6 G; 2 T; 0 U; 0 Other;

  Query Match             0.5%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 73;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2259 GGGGTGCCTCCATTTCAGCT 2278
              ||||||||||||||||||||
Db         20 GGGGTGCCTCCATTTCAGCT 1


RESULT 86
ACC83582/c
ID   ACC83582 standard; DNA; 20 BP.
XX
AC   ACC83582;
XX
DT   08-SEP-2003  (first entry)
XX
DE   Human Toll-like receptor 4 antisense oligonucleotide ISIS #114632.
XX
KW   Human; Toll-like receptor 4; receptor; antiinflammatory; immunomodulator;
KW   phosphorothioate; antisense; ss.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "OTHER = phosphorothioate nucleotides, the
FT                   oligonucleotide comprises a central gap region of 10 2'-
FT                   deoxynucleotides, flanked on both sites by 5-nucleotides
FT                   wings composed of 2'-methoxyethyl nucleotides"
FT   modified_base   5
FT                   /*tag=  b
FT                   /mod_base= m5c
FT   modified_base   10
FT                   /*tag=  c
FT                   /mod_base= m5c
FT   modified_base   12
FT                   /*tag=  d
FT                   /mod_base= m5c
XX
PN   WO2003044163-A2.
XX
PD   30-MAY-2003.
XX
PF   14-NOV-2002; 2002WO-US036390.
XX
PR   19-NOV-2001; 2001US-00001863.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Karras JG,  Koller E;
XX
DR   WPI; 2003-468766/44.
XX
PT   New antisense oligonucleotides for modulating Toll-like receptor 4 gene
PT   expression, particularly useful for preventing, delaying or treating e.g.
PT   inflammatory disorders, or conditions involving Th1 or Th2 immune
PT   responses.
XX
PS   Claim 3; Page 95; 110pp; English.
XX
CC   The present sequence is that of antisense oligonucleotide ISIS #114632.
CC   This chimeric phosphorothioate oligonucleotide, having 2'-MOE wings and a
CC   deoxy gap, is targeted to the coding region of human Toll-like receptor 4
CC   mRNA. It exhibits 72% inhibition of human Toll-like receptor 4 expression
CC   in THP-1 cells. It is useful for inhibiting the expression of Toll-like
CC   receptor 4 in cells or tissues. The oligonucleotide is particularly
CC   useful for treating or preventing a disease or condition associated with
CC   Toll-like receptor 4, e.g. an inflammatory disorder or a condition
CC   involving an immune response, particularly Th1 or Th2 responses
XX
SQ   Sequence 20 BP; 5 A; 3 C; 8 G; 4 T; 0 U; 0 Other;

  Query Match             0.5%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 73;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        501 CCCATCCAGAGTTTAGCCCT 520
              ||||||||||||||||||||
Db         20 CCCATCCAGAGTTTAGCCCT 1


RESULT 87
ACC83593/c
ID   ACC83593 standard; DNA; 20 BP.
XX
AC   ACC83593;
XX
DT   08-SEP-2003  (first entry)
XX
DE   Human Toll-like receptor 4 antisense oligonucleotide ISIS #114649.
XX
KW   Human; Toll-like receptor 4; receptor; antiinflammatory; immunomodulator;
KW   phosphorothioate; antisense; ss.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag=  a
FT                   /mod_base= OTHER
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```
FT                   /note= "OTHER = phosphorothioate nucleotides, the
FT                   oligonucleotide comprises a central gap region of 10 2'-
FT                   deoxynucleotides, flanked on both sites by 5-nucleotides
FT                   wings composed of 2'-methoxyethyl nucleotides"
FT   modified_base   2
FT                   /*tag=  b
FT                   /mod_base= m5c
FT   modified_base   3
FT                   /*tag=  c
FT                   /mod_base= m5c
FT   modified_base   14
FT                   /*tag=  d
FT                   /mod_base= m5c
FT   modified_base   17
FT                   /*tag=  e
FT                   /mod_base= m5c
FT   modified_base   18
FT                   /*tag=  f
FT                   /mod_base= m5c
FT   modified_base   19
FT                   /*tag=  g
FT                   /mod_base= m5c
XX
PN   WO2003044163-A2.
XX
PD   30-MAY-2003.
XX
PF   14-NOV-2002; 2002WO-US036390.
XX
PR   19-NOV-2001; 2001US-00001863.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Karras JG,  Koller E;
XX
DR   WPI; 2003-468766/44.
XX
PT   New antisense oligonucleotides for modulating Toll-like receptor 4 gene
PT   expression, particularly useful for preventing, delaying or treating e.g.
PT   inflammatory disorders, or conditions involving Th1 or Th2 immune
PT   responses.
XX
PS   Claim 3; Page 95; 110pp; English.
XX
CC   The present sequence is that of antisense oligonucleotide ISIS #114649.
CC   This chimeric phosphorothioate oligonucleotide, having 2'-MOE wings and a
CC   deoxy gap, is targeted to the 3' untranslated region of human Toll-like
CC   receptor 4 mRNA. It exhibits 91% inhibition of human Toll-like receptor 4
CC   expression in THP-1 cells. It is useful for inhibiting the expression of
CC   Toll-like receptor 4 in cells or tissues. The oligonucleotide is
CC   particularly useful for treating or preventing a disease or condition
CC   associated with Toll-like receptor 4, e.g. an inflammatory disorder or a
CC   condition involving an immune response, particularly Th1 or Th2 responses
XX
SQ   Sequence 20 BP; 4 A; 6 C; 4 G; 6 T; 0 U; 0 Other;

  Query Match             0.5%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 73;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2821 AGGGCTGCTAATCTCAAGGA 2840
              ||||||||||||||||||||
Db         20 AGGGCTGCTAATCTCAAGGA 1


RESULT 88
ACC83607/c
ID   ACC83607 standard; DNA; 20 BP.
XX
AC   ACC83607;
XX
DT   08-SEP-2003  (first entry)
XX
DE   Human Toll-like receptor 4 antisense oligonucleotide ISIS #114630.
XX
KW   Human; Toll-like receptor 4; receptor; antiinflammatory; immunomodulator;
KW   phosphorothioate; antisense; ss.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "OTHER = phosphorothioate nucleotides, the
FT                   oligonucleotide comprises a central gap region of 10 2'-
FT                   deoxynucleotides, flanked on both sites by 5-nucleotides
FT                   wings composed of 2'-methoxyethyl nucleotides"
FT   modified_base   9
FT                   /*tag=  b
FT                   /mod_base= m5c
FT   modified_base   12
FT                   /*tag=  c
FT                   /mod_base= m5c
FT   modified_base   14
FT                   /*tag=  d
FT                   /mod_base= m5c
FT   modified_base   15
FT                   /*tag=  e
FT                   /mod_base= m5c
FT   modified_base   19
FT                   /*tag=  f
FT                   /mod_base= m5c
XX
PN   WO2003044163-A2.
XX
PD   30-MAY-2003.
XX
PF   14-NOV-2002; 2002WO-US036390.
XX
PR   19-NOV-2001; 2001US-00001863.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Karras JG,  Koller E;
XX
DR   WPI; 2003-468766/44.
XX
PT   New antisense oligonucleotides for modulating Toll-like receptor 4 gene
PT   expression, particularly useful for preventing, delaying or treating e.g.
PT   inflammatory disorders, or conditions involving Th1 or Th2 immune
PT   responses.
XX
PS   Example 14; Page 95; 110pp; English.
XX
CC   The present sequence is that of antisense oligonucleotide ISIS #114630.
CC   This chimeric phosphorothioate oligonucleotide, having 2'-MOE wings and a
CC   deoxy gap, is targeted to the start codon region of human Toll-like
CC   receptor 4 mRNA. It exhibits 48% inhibition of human Toll-like receptor 4
CC   expression in THP-1 cells. It is useful for inhibiting the expression of
CC   Toll-like receptor 4 in cells or tissues. The oligonucleotide is
CC   particularly useful for treating or preventing a disease or condition
CC   associated with Toll-like receptor 4, e.g. an inflammatory disorder or a
CC   condition involving an immune response, particularly Th1 or Th2 responses
XX
SQ   Sequence 20 BP; 7 A; 5 C; 3 G; 5 T; 0 U; 0 Other;

  Query Match             0.5%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 73;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       282 TGCATGGAGCTGAATTTCTA 301
             ||||||||||||||||||||
Db        20 TGCATGGAGCTGAATTTCTA 1
```

```
RESULT 89
ACC83610/c
ID   ACC83610 standard; DNA; 20 BP.
XX
AC   ACC83610;
XX
DT   08-SEP-2003  (first entry)
XX
DE   Human Toll-like receptor 4 antisense oligonucleotide ISIS #114636.
XX
KW   Human; Toll-like receptor 4; receptor; antiinflammatory; immunomodulator;
KW   phosphorothioate; antisense; ss.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "OTHER = phosphorothioate nucleotides, the
FT                   oligonucleotide comprises a central gap region of 10 2'-
FT                   deoxynucleotides, flanked on both sites by 5-nucleotides
FT                   wings composed of 2'-methoxyethyl nucleotides"
FT   modified_base   4
FT                   /*tag=  b
FT                   /mod_base= m5c
FT   modified_base   5
FT                   /*tag=  c
FT                   /mod_base= m5c
FT   modified_base   8
FT                   /*tag=  d
FT                   /mod_base= m5c
FT   modified_base   13
FT                   /*tag=  e
FT                   /mod_base= m5c
FT   modified_base   14
FT                   /*tag=  f
FT                   /mod_base= m5c
XX
PN   WO2003044163-A2.
XX
PD   30-MAY-2003.
XX
PF   14-NOV-2002; 2002WO-US036390.
XX
PR   19-NOV-2001; 2001US-00001863.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Karras JG,  Koller E;
XX
DR   WPI; 2003-468766/44.
XX
PT   New antisense oligonucleotides for modulating Toll-like receptor 4 gene
PT   expression, particularly useful for preventing, delaying or treating e.g.
PT   inflammatory disorders, or conditions involving Th1 or Th2 immune
PT   responses.
XX
PS   Example 14; Page 95; 110pp; English.
XX
CC   The present sequence is that of antisense oligonucleotide ISIS #114636.
CC   This chimeric phosphorothioate oligonucleotide, having 2'-MOE wings and a
CC   deoxy gap, is targeted to the coding region of human Toll-like receptor 4
CC   mRNA. It exhibits 59% inhibition of human Toll-like receptor 4 expression
CC   in THP-1 cells. Such oligonucleotides are useful for inhibiting the
CC   expression of Toll-like receptor 4 in cells or tissues. The
CC   oligonucleotide is particularly useful for treating or preventing a
CC   disease or condition associated with Toll-like receptor 4, e.g. an
CC   inflammatory disorder or a condition involving an immune response,
CC   particularly Th1 or Th2 responses
XX
SQ   Sequence 20 BP; 8 A; 6 C; 3 G; 3 T; 0 U; 0 Other;

  Query Match             0.5%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 73;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        903 ATTCAAGGTCTGGCTGGTTT 922
              ||||||||||||||||||||
Db         20 ATTCAAGGTCTGGCTGGTTT 1


RESULT 90
ACC83613/c
ID   ACC83613 standard; DNA; 20 BP.
XX
AC   ACC83613;
XX
DT   08-SEP-2003  (first entry)
XX
DE   Human Toll-like receptor 4 antisense oligonucleotide ISIS #114645.
XX
KW   Human; Toll-like receptor 4; receptor; antiinflammatory; immunomodulator;
KW   phosphorothioate; antisense; ss.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "OTHER = phosphorothioate nucleotides, the
FT                   oligonucleotide comprises a central gap region of 10 2'-
FT                   deoxynucleotides, flanked on both sites by 5-nucleotides
FT                   wings composed of 2'-methoxyethyl nucleotides"
FT   modified_base   2
FT                   /*tag=  b
FT                   /mod_base= m5c
FT   modified_base   5
FT                   /*tag=  c
FT                   /mod_base= m5c
FT   modified_base   11
FT                   /*tag=  d
FT                   /mod_base= m5c
FT   modified_base   12
FT                   /*tag=  e
FT                   /mod_base= m5c
FT   modified_base   14
FT                   /*tag=  f
FT                   /mod_base= m5c
FT   modified_base   16
FT                   /*tag=  e
FT                   /mod_base= m5c
FT   modified_base   17
FT                   /*tag=  f
FT                   /mod_base= m5c
XX
PN   WO2003044163-A2.
XX
PD   30-MAY-2003.
XX
PF   14-NOV-2002; 2002WO-US036390.
XX
PR   19-NOV-2001; 2001US-00001863.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Karras JG,  Koller E;
XX
DR   WPI; 2003-468766/44.
XX
PT   New antisense oligonucleotides for modulating Toll-like receptor 4 gene
PT   expression, particularly useful for preventing, delaying or treating e.g.
PT   inflammatory disorders, or conditions involving Th1 or Th2 immune
PT   responses.
XX
```

```
PS   Example 14; Page 95; 110pp; English.
XX
CC   The present sequence is that of antisense oligonucleotide ISIS #114645.
CC   This chimeric phosphorothioate oligonucleotide, having 2'-MOE wings and a
CC   deoxy gap, is targeted to the coding region of human Toll-like receptor 4
CC   mRNA. It exhibits 38% inhibition of human Toll-like receptor 4 expression
CC   in THP-1 cells. More active oligonucleotides are useful for inhibiting
CC   the expression of Toll-like receptor 4 in cells or tissues. The
CC   oligonucleotide is particularly useful for treating or preventing a
CC   disease or condition associated with Toll-like receptor 4, e.g. an
CC   inflammatory disorder or a condition involving an immune response,
CC   particularly Th1 or Th2 responses
XX
SQ   Sequence 20 BP; 5 A; 7 C; 7 G; 1 T; 0 U; 0 Other;

  Query Match             0.5%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 73;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2304 CCCGGTGTGGCCATTGCTGC 2323
              ||||||||||||||||||||
Db         20 CCCGGTGTGGCCATTGCTGC 1


RESULT 91
ACC83585/c
ID   ACC83585 standard; DNA; 20 BP.
XX
AC   ACC83585;
XX
DT   08-SEP-2003  (first entry)
XX
DE   Human Toll-like receptor 4 antisense oligonucleotide ISIS #114640.
XX
KW   Human; Toll-like receptor 4; receptor; antiinflammatory; immunomodulator;
KW   phosphorothioate; antisense; ss.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   modified_base    1. .20
FT                    /*tag=  a
FT                    /mod_base= OTHER
FT                    /note= "OTHER = phosphorothioate nucleotides, the
FT                    oligonucleotide comprises a central gap region of 10 2'-
FT                    deoxynucleotides, flanked on both sites by 5-nucleotides
FT                    wings composed of 2'-methoxyethyl nucleotides"
FT   modified_base    3
FT                    /*tag=  b
FT                    /mod_base= m5c
FT   modified_base    7
FT                    /*tag=  c
FT                    /mod_base= m5c
FT   modified_base    9
FT                    /*tag=  d
FT                    /mod_base= m5c
FT   modified_base    12
FT                    /*tag=  e
FT                    /mod_base= m5c
FT   modified_base    14
FT                    /*tag=  f
FT                    /mod_base= m5c
FT   modified_base    18
FT                    /*tag=  g
FT                    /mod_base= m5c
XX
PN   WO2003044163-A2.
XX
PD   30-MAY-2003.
XX
PF   14-NOV-2002; 2002WO-US036390.
XX
PR   19-NOV-2001; 2001US-00001863.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Karras JG,  Koller E;
XX
DR   WPI; 2003-468766/44.
XX
PT   New antisense oligonucleotides for modulating Toll-like receptor 4 gene
PT   expression, particularly useful for preventing, delaying or treating e.g.
PT   inflammatory disorders, or conditions involving Th1 or Th2 immune
PT   responses.
XX
PS   Claim 3; Page 95; 110pp; English.
XX
CC   The present sequence is that of antisense oligonucleotide ISIS #114640.
CC   This chimeric phosphorothioate oligonucleotide, having 2'-MOE wings and a
CC   deoxy gap, is targeted to the coding region of human Toll-like receptor 4
CC   mRNA. It exhibits 87% inhibition of human Toll-like receptor 4 expression
CC   in THP-1 cells. It is useful for inhibiting the expression of Toll-like
CC   receptor 4 in cells or tissues. The oligonucleotide is particularly
CC   useful for treating or preventing a disease or condition associated with
CC   Toll-like receptor 4, e.g. an inflammatory disorder or a condition
CC   involving an immune response, particularly Th1 or Th2 responses
XX
SQ   Sequence 20 BP; 7 A; 6 C; 3 G; 4 T; 0 U; 0 Other;

  Query Match             0.5%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 73;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2016 ATGCCTGTGCTGAGTTTGAA 2035
              ||||||||||||||||||||
Db         20 ATGCCTGTGCTGAGTTTGAA 1


RESULT 92
ACC83598/c
ID   ACC83598 standard; DNA; 20 BP.
XX
AC   ACC83598;
XX
DT   08-SEP-2003  (first entry)
XX
DE   Human Toll-like receptor 4 antisense oligonucleotide ISIS #114654.
XX
KW   Human; Toll-like receptor 4; receptor; antiinflammatory; immunomodulator;
KW   phosphorothioate; antisense; ss.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   modified_base    1. .20
FT                    /*tag=  a
FT                    /mod_base= OTHER
FT                    /note= "OTHER = phosphorothioate nucleotides, the
FT                    oligonucleotide comprises a central gap region of 10 2'-
FT                    deoxynucleotides, flanked on both sites by 5-nucleotides
FT                    wings composed of 2'-methoxyethyl nucleotides"
FT   modified_base    1
FT                    /*tag=  b
FT                    /mod_base= m5c
FT   modified_base    2
FT                    /*tag=  c
FT                    /mod_base= m5c
FT   modified_base    3
FT                    /*tag=  d
FT                    /mod_base= m5c
FT   modified_base    17
FT                    /*tag=  e
FT                    /mod_base= m5c
FT   modified_base    18
FT                    /*tag=  f
FT                    /mod_base= m5c
```

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FT   modified_base   19
FT                   /*tag=  g
FT                   /mod_base= m5c
FT   modified_base   20
FT                   /*tag=  h
FT                   /mod_base= m5c
XX
PN   WO2003044163-A2.
XX
PD   30-MAY-2003.
XX
PF   14-NOV-2002; 2002WO-US036390.
XX
PR   19-NOV-2001; 2001US-00001863.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Karras JG,  Koller E;
XX
DR   WPI; 2003-468766/44.
XX
PT   New antisense oligonucleotides for modulating Toll-like receptor 4 gene
PT   expression, particularly useful for preventing, delaying or treating e.g.
PT   inflammatory disorders, or conditions involving Th1 or Th2 immune
PT   responses.
XX
PS   Claim 3; Page 95; 110pp; English.
XX
CC   The present sequence is that of antisense oligonucleotide ISIS #114654.
CC   This chimeric phosphorothioate oligonucleotide, having 2'-MOE wings and a
CC   deoxy gap, is targeted to the 3' untranslated region of human Toll-like
CC   receptor 4 mRNA. It exhibits 92% inhibition of human Toll-like receptor 4
CC   expression in THP-1 cells. It is useful for inhibiting the expression of
CC   Toll-like receptor 4 in cells or tissues. The oligonucleotide is
CC   particularly useful for treating or preventing a disease or condition
CC   associated with Toll-like receptor 4, e.g. an inflammatory disorder or a
CC   condition involving an immune response, particularly Th1 or Th2 responses
XX
SQ   Sequence 20 BP; 5 A; 7 C; 4 G; 4 T; 0 U; 0 Other;

  Query Match             0.5%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 73;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       3531 GGGGCACTCTTTTAAACGGG 3550
              ||||||||||||||||||||
Db         20 GGGGCACTCTTTTAAACGGG 1


RESULT 93
ACC83586/c
ID   ACC83586 standard; DNA; 20 BP.
XX
AC   ACC83586;
XX
DT   08-SEP-2003  (first entry)
XX
DE   Human Toll-like receptor 4 antisense oligonucleotide ISIS #114641.
XX
KW   Human; Toll-like receptor 4; receptor; antiinflammatory; immunomodulator;
KW   phosphorothioate; antisense; ss.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "OTHER = phosphorothioate nucleotides, the
FT                   oligonucleotide comprises a central gap region of 10 2'-
FT                   deoxynucleotides, flanked on both sites by 5-nucleotides
FT                   wings composed of 2'-methoxyethyl nucleotides"
FT   modified_base   4
FT                   /*tag=  b
FT                   /mod_base= m5c
FT   modified_base   5
FT                   /*tag=  c
FT                   /mod_base= m5c
FT   modified_base   8
FT                   /*tag=  d
FT                   /mod_base= m5c
FT   modified_base   10
FT                   /*tag=  e
FT                   /mod_base= m5c
FT   modified_base   12
FT                   /*tag=  f
FT                   /mod_base= m5c
FT   modified_base   13
FT                   /*tag=  g
FT                   /mod_base= m5c
XX
PN   WO2003044163-A2.
XX
PD   30-MAY-2003.
XX
PF   14-NOV-2002; 2002WO-US036390.
XX
PR   19-NOV-2001; 2001US-00001863.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Karras JG,  Koller E;
XX
DR   WPI; 2003-468766/44.
XX
PT   New antisense oligonucleotides for modulating Toll-like receptor 4 gene
PT   expression, particularly useful for preventing, delaying or treating e.g.
PT   inflammatory disorders, or conditions involving Th1 or Th2 immune
PT   responses.
XX
PS   Claim 3; Page 95; 110pp; English.
XX
CC   The present sequence is that of antisense oligonucleotide ISIS #114641.
CC   This chimeric phosphorothioate oligonucleotide, having 2'-MOE wings and a
CC   deoxy gap, is targeted to the coding region of human Toll-like receptor 4
CC   mRNA. It exhibits 83% inhibition of human Toll-like receptor 4 expression
CC   in THP-1 cells. It is useful for inhibiting the expression of Toll-like
CC   receptor 4 in cells or tissues. The oligonucleotide is particularly
CC   useful for treating or preventing a disease or condition associated with
CC   Toll-like receptor 4, e.g. an inflammatory disorder or a condition
CC   involving an immune response, particularly Th1 or Th2 responses
XX
SQ   Sequence 20 BP; 7 A; 6 C; 5 G; 2 T; 0 U; 0 Other;

  Query Match             0.5%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 73;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2060 CATCATTGGTGTGTCGGTCC 2079
              ||||||||||||||||||||
Db         20 CATCATTGGTGTGTCGGTCC 1


RESULT 94
ACC83587/c
ID   ACC83587 standard; DNA; 20 BP.
XX
AC   ACC83587;
XX
DT   08-SEP-2003  (first entry)
XX
DE   Human Toll-like receptor 4 antisense oligonucleotide ISIS #114642.
XX
KW   Human; Toll-like receptor 4; receptor; antiinflammatory; immunomodulator;
KW   phosphorothioate; antisense; ss.
XX
```

```
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "OTHER = phosphorothioate nucleotides, the
FT                   oligonucleotide comprises a central gap region of 10 2'-
FT                   deoxynucleotides, flanked on both sites by 5-nucleotides
FT                   wings composed of 2'-methoxyethyl nucleotides"
FT   modified_base   2
FT                   /*tag=  b
FT                   /mod_base= m5c
FT   modified_base   6
FT                   /*tag=  c
FT                   /mod_base= m5c
FT   modified_base   8
FT                   /*tag=  d
FT                   /mod_base= m5c
FT   modified_base   10
FT                   /*tag=  e
FT                   /mod_base= m5c
FT   modified_base   17
FT                   /*tag=  f
FT                   /mod_base= m5c
FT   modified_base   18
FT                   /*tag=  g
FT                   /mod_base= m5c
XX
PN   WO2003044163-A2.
XX
PD   30-MAY-2003.
XX
PF   14-NOV-2002; 2002WO-US036390.
XX
PR   19-NOV-2001; 2001US-00001863.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Karras JG,  Koller E;
XX
DR   WPI; 2003-468766/44.
XX
PT   New antisense oligonucleotides for modulating Toll-like receptor 4 gene
PT   expression, particularly useful for preventing, delaying or treating e.g.
PT   inflammatory disorders, or conditions involving Th1 or Th2 immune
PT   responses.
XX
PS   Claim 3; Page 95; 110pp; English.
XX
CC   The present sequence is that of antisense oligonucleotide ISIS #114642.
CC   This chimeric phosphorothioate oligonucleotide, having 2'-MOE wings and a
CC   deoxy gap, is targeted to the coding region of human Toll-like receptor 4
CC   mRNA. It exhibits 76% inhibition of human Toll-like receptor 4 expression
CC   in THP-1 cells. It is useful for inhibiting the expression of Toll-like
CC   receptor 4 in cells or tissues. The oligonucleotide is particularly
CC   useful for treating or preventing a disease or condition associated with
CC   Toll-like receptor 4, e.g. an inflammatory disorder or a condition
CC   involving an immune response, particularly Th1 or Th2 responses
XX
SQ   Sequence 20 BP; 8 A; 6 C; 5 G; 1 T; 0 U; 0 Other;

  Query Match             0.5%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 73;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2073 TCGGTCCTCAGTGTGCTTGT 2092
              ||||||||||||||||||||
Db         20 TCGGTCCTCAGTGTGCTTGT 1


RESULT 95
ACC83591/c
```

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ID   ACC83591 standard; DNA; 20 BP.
XX
AC   ACC83591;
XX
DT   08-SEP-2003  (first entry)
XX
DE   Human Toll-like receptor 4 antisense oligonucleotide ISIS #114647.
XX
KW   Human; Toll-like receptor 4; receptor; antiinflammatory; immunomodulator;
KW   phosphorothioate; antisense; ss.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "OTHER = phosphorothioate nucleotides, the
FT                   oligonucleotide comprises a central gap region of 10 2'-
FT                   deoxynucleotides, flanked on both sites by 5-nucleotides
FT                   wings composed of 2'-methoxyethyl nucleotides"
FT   modified_base   2
FT                   /*tag=  b
FT                   /mod_base= m5c
FT   modified_base   5
FT                   /*tag=  c
FT                   /mod_base= m5c
FT   modified_base   7
FT                   /*tag=  d
FT                   /mod_base= m5c
FT   modified_base   19
FT                   /*tag=  e
FT                   /mod_base= m5c
XX
PN   WO2003044163-A2.
XX
PD   30-MAY-2003.
XX
PF   14-NOV-2002; 2002WO-US036390.
XX
PR   19-NOV-2001; 2001US-00001863.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Karras JG,  Koller E;
XX
DR   WPI; 2003-468766/44.
XX
PT   New antisense oligonucleotides for modulating Toll-like receptor 4 gene
PT   expression, particularly useful for preventing, delaying or treating e.g.
PT   inflammatory disorders, or conditions involving Th1 or Th2 immune
PT   responses.
XX
PS   Claim 3; Page 95; 110pp; English.
XX
CC   The present sequence is that of antisense oligonucleotide ISIS #114647.
CC   This chimeric phosphorothioate oligonucleotide, having 2'-MOE wings and a
CC   deoxy gap, is targeted to the coding region of human Toll-like receptor 4
CC   mRNA. It exhibits 71% inhibition of human Toll-like receptor 4 expression
CC   in THP-1 cells. It is useful for inhibiting the expression of Toll-like
CC   receptor 4 in cells or tissues. The oligonucleotide is particularly
CC   useful for treating or preventing a disease or condition associated with
CC   Toll-like receptor 4, e.g. an inflammatory disorder or a condition
CC   involving an immune response, particularly Th1 or Th2 responses
XX
SQ   Sequence 20 BP; 3 A; 4 C; 8 G; 5 T; 0 U; 0 Other;

  Query Match             0.5%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 73;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2380 AGCACTTCATCCAGAGCCGC 2399
              ||||||||||||||||||||
```

```
Db         20 AGCACTTCATCCAGAGCCGC 1


RESULT 96
ACC83595/c
ID   ACC83595 standard; DNA; 20 BP.
XX
AC   ACC83595;
XX
DT   08-SEP-2003  (first entry)
XX
DE   Human Toll-like receptor 4 antisense oligonucleotide ISIS #114651.
XX
KW   Human; Toll-like receptor 4; receptor; antiinflammatory; immunomodulator;
KW   phosphorothioate; antisense; ss.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   modified_base    1. .20
FT                    /*tag=  a
FT                    /mod_base= OTHER
FT                    /note= "OTHER = phosphorothioate nucleotides, the
FT                    oligonucleotide comprises a central gap region of 10 2'-
FT                    deoxynucleotides, flanked on both sites by 5-nucleotides
FT                    wings composed of 2'-methoxyethyl nucleotides"
FT   modified_base    1
FT                    /*tag=  b
FT                    /mod_base= m5c
FT   modified_base    18
FT                    /*tag=  c
FT                    /mod_base= m5c
FT   modified_base    19
FT                    /*tag=  d
FT                    /mod_base= m5c
FT   modified_base    20
FT                    /*tag=  e
FT                    /mod_base= m5c
XX
PN   WO2003044163-A2.
XX
PD   30-MAY-2003.
XX
PF   14-NOV-2002; 2002WO-US036390.
XX
PR   19-NOV-2001; 2001US-00001863.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Karras JG,  Koller E;
XX
DR   WPI; 2003-468766/44.
XX
PT   New antisense oligonucleotides for modulating Toll-like receptor 4 gene
PT   expression, particularly useful for preventing, delaying or treating e.g.
PT   inflammatory disorders, or conditions involving Th1 or Th2 immune
PT   responses.
XX
PS   Claim 3; Page 95; 110pp; English.
XX
CC   The present sequence is that of antisense oligonucleotide ISIS #114651.
CC   This chimeric phosphorothioate oligonucleotide, having 2'-MOE wings and a
CC   deoxy gap, is targeted to the 3' untranslated region of human Toll-like
CC   receptor 4 mRNA. It exhibits 91% inhibition of human Toll-like receptor 4
CC   expression in THP-1 cells. It is useful for inhibiting the expression of
CC   Toll-like receptor 4 in cells or tissues. The oligonucleotide is
CC   particularly useful for treating or preventing a disease or condition
CC   associated with Toll-like receptor 4, e.g. an inflammatory disorder or a
CC   condition involving an immune response, particularly Th1 or Th2 responses
XX
SQ   Sequence 20 BP; 4 A; 4 C; 6 G; 6 T; 0 U; 0 Other;

  Query Match             0.5%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 73;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2894 GGGCATTTCAACCAACTCAG 2913
              ||||||||||||||||||||
Db         20 GGGCATTTCAACCAACTCAG 1


RESULT 97
ACC83612/c
ID   ACC83612 standard; DNA; 20 BP.
XX
AC   ACC83612;
XX
DT   08-SEP-2003  (first entry)
XX
DE   Human Toll-like receptor 4 antisense oligonucleotide ISIS #114639.
XX
KW   Human; Toll-like receptor 4; receptor; antiinflammatory; immunomodulator;
KW   phosphorothioate; antisense; ss.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   modified_base    1. .20
FT                    /*tag=  a
FT                    /mod_base= OTHER
FT                    /note= "OTHER = phosphorothioate nucleotides, the
FT                    oligonucleotide comprises a central gap region of 10 2'-
FT                    deoxynucleotides, flanked on both sites by 5-nucleotides
FT                    wings composed of 2'-methoxyethyl nucleotides"
FT   modified_base    2
FT                    /*tag=  b
FT                    /mod_base= m5c
FT   modified_base    5
FT                    /*tag=  c
FT                    /mod_base= m5c
FT   modified_base    6
FT                    /*tag=  d
FT                    /mod_base= m5c
FT   modified_base    8
FT                    /*tag=  e
FT                    /mod_base= m5c
FT   modified_base    13
FT                    /*tag=  f
FT                    /mod_base= m5c
FT   modified_base    14
FT                    /*tag=  g
FT                    /mod_base= m5c
FT   modified_base    20
FT                    /*tag=  h
FT                    /mod_base= m5c
XX
PN   WO2003044163-A2.
XX
PD   30-MAY-2003.
XX
PF   14-NOV-2002; 2002WO-US036390.
XX
PR   19-NOV-2001; 2001US-00001863.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Karras JG,  Koller E;
XX
DR   WPI; 2003-468766/44.
XX
PT   New antisense oligonucleotides for modulating Toll-like receptor 4 gene
PT   expression, particularly useful for preventing, delaying or treating e.g.
PT   inflammatory disorders, or conditions involving Th1 or Th2 immune
PT   responses.
XX
PS   Example 14; Page 95; 110pp; English.
```

XX
CC The present sequence is that of antisense oligonucleotide ISIS #114639.
CC This chimeric phosphorothioate oligonucleotide, having 2'-MOE wings and a
CC deoxy gap, is targeted to the coding region of human Toll-like receptor 4
CC mRNA. It exhibits 0% inhibition of human Toll-like receptor 4 expression
CC in THP-1 cells. Active oligonucleotides are useful for inhibiting the
CC expression of Toll-like receptor 4 in cells or tissues. The
CC oligonucleotide is particularly useful for treating or preventing a
CC disease or condition associated with Toll-like receptor 4, e.g. an
CC inflammatory disorder or a condition involving an immune response,
CC particularly Th1 or Th2 responses
XX
SQ Sequence 20 BP; 1 A; 7 C; 5 G; 7 T; 0 U; 0 Other;

Query Match 0.5%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 73;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1943 GATCAAGGACCAGAGGCAGC 1962
||||||||||||||||||||
Db 20 GATCAAGGACCAGAGGCAGC 1

RESULT 98
AAI69670/c
ID AAI69670 standard; DNA; 24 BP.
XX
AC AAI69670;
XX
DT 10-JAN-2002 (first entry)
XX
DE Hepatitis E virus HEV-T1 sequence related PCR primer #35.
XX
KW Hepatitis E virus; HEV-T1; hepatitis infection; PCR primer; ss.
XX
OS Unidentified.
XX
PN CN1300771-A.
XX
PD 27-JUN-2001.
XX
PF 23-DEC-1999; 99CN-00125741.
XX
PR 23-DEC-1999; 99CN-00125741.
XX
PA (CHME-) CHINESE MEDICINE & BIOLOGIC PROD APPRAIS.
XX
PI Wang Y, Zhang H, Li H;
XX
DR WPI; 2001-550442/62.
XX
PT Hepatitis E virus gene sequence and its application.
XX
PS Example 1; Page 15(Disclosure); 34pp; Chinese.
XX
CC The present invention relates to a novel nucleotide sequence and protein
CC of a new hepatitis E virus HEV-T1 and the application of the nucleotide
CC sequence and protein in diagnosing, preventing and treating hepatitis.
CC The present sequence is a PCR primer described in the exemplification of
CC the invention
XX
SQ Sequence 24 BP; 6 A; 4 C; 11 G; 3 T; 0 U; 0 Other;

Query Match 0.5%; Score 19.2; DB 1; Length 24;
Best Local Similarity 87.5%; Pred. No. 1.2e+02;
Matches 21; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 3250 CCATCCTGGTCATTCTCGAACATG 3273
||||||||| | ||||||| ||||
Db 24 CCATCCTGGCCCTTCTCGACCATG 1

RESULT 99
AAC84782
ID AAC84782 standard; DNA; 19 BP.
XX
AC AAC84782;
XX
DT 20-APR-2001 (first entry)
XX
DE Human TLR4 gene exon 4 amplifying forward primer.
XX
KW TLR4; toll receptor 4; innate immunity; gram-negative bacteria; sepsis;
KW respiratory distress syndrome; LPS; lipopolysaccharide; asthma; ARDS;
KW chronic airway disease; arthritis; inflammatory disease; SIRS; human;
KW systematic inflammatory response syndrome; pyelonephritis; bronchitis;
KW acute respiratory distress syndrome; gall bladder disease; pneumonia;
KW cystic fibrosis; antibacterial; antiinflammatory; PCR primer; ss.
XX
OS Homo sapiens.
XX
PN WO200077204-A1.
XX
PD 21-DEC-2000.
XX
PF 08-JUN-2000; 2000WO-US015723.
XX
PR 10-JUN-1999; 99US-00329515.
XX
PA (IOWA) UNIV IOWA RES FOUND.
PA (LORE/) LORENZ E.
XX
PI Lorenz E, Schwartz DA, Schutte BC;
XX
DR WPI; 2001-061872/07.
XX
PT Identifying humans at risk of, or having indication associated with
PT altered innate immunity involves detecting or determining whether DNA
PT amplified from a biological sample encodes a portion of variant toll
PT receptor 4.
XX
PS Example 1; Page 31; 97pp; English.
XX
CC The invention relates to human toll receptor 4 (TLR4) nucleic acid and
CC methods to identify polymorphisms at the human TLR4 locus and to identify
CC individuals at risk of, or having, an indication associated with altered
CC innate immunity. A variant TLR4 nucleic acid is useful as a diagnostic
CC reagent for detecting a polymorphism in human TLR4 gene. Since the
CC presence of TLR4 mutation is associated with gram-negative sepsis,
CC severity of sepsis, pre-term delivery and respiratory distress syndrome
CC in pre-term infants, agents which alter TLR4 activity are useful for
CC preventing or ameliorating infection by gram-negative bacteria, sepsis
CC induced by gram-negative bacteria, LPS (lipopolysaccharide) induced
CC chronic airway disease, asthma, arthritis, local and systemic
CC inflammatory disease conditions such as systematic inflammatory response
CC syndrome (SIRS) or acute respiratory distress syndrome (ARDS),
CC pyelonephritis, gall bladder disease, pneumonia, bronchitis, chronic
CC obstructive pulmonary disease, local gram-negative bacterial infection
CC and cystic fibrosis. Sequences AAC84776-823 represent PCR primers for
CC amplifying the exons of human TLR4 gene
XX
SQ Sequence 19 BP; 5 A; 6 C; 3 G; 5 T; 0 U; 0 Other;

Query Match 0.5%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 86;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 812 CTTTATCCAACCAGGTGCA 830
||||||||||||||||||||
Db 1 CTTTATCCAACCAGGTGCA 19

RESULT 100
ADB39125/c
ID ADB39125 standard; DNA; 19 BP.
XX

AC ADB39125;
XX
DT 04-DEC-2003 (first entry)
XX
DE Human toll-like receptor (TLR) -4 RT-PCR primer Seq ID4.
XX
KW vascular disease; Toll-like receptor-4 inhibitor; TLR-4 inhibitor;
KW atherosclerosis; restenosis; inflammation; vasotropic;
KW antiarteriosclerotic; thrombolytic; cardiant; antiinflammatory;
KW antisense therapy; gene therapy; transplant atherosclerosis;
KW vein-graft atherosclerosis; thrombosis; stent restenosis;
KW angioplasty restenosis; heart disease; PCR; primer;
KW reverse transcription polymerase chain reaction; RT-PCR; human; ss;
KW TLR-4; Toll-like receptor 4.
XX
OS Homo sapiens.
XX
PN US2003077279-A1.
XX
PD 24-APR-2003.
XX
PF 23-APR-2002; 2002US-00128166.
XX
PR 24-OCT-2001; 2001US-0335637P.
PR 17-DEC-2001; 2001US-0341359P.
XX
PA (CEDA-) CEDARS SINAI MEDICAL CENT.
XX
PI Arditi M, Rajavashisth T, Shah PK;
XX
DR WPI; 2003-615988/58.
XX
PT Treating a vascular disease, particularly atherosclerosis, thrombosis,
PT restenosis, stent restenosis or angioplasty restenosis, by administering
PT a Toll-like receptor-4 (TLR-4) inhibitor to a mammal.
XX
PS Example 6; Page 10; 21pp; English.
XX
CC This invention relates to a novel method for the treatment of a vascular
CC disease through the administration of a Toll-like receptor-4 (TLR-4)
CC inhibitor to a mammal. The TLR-4 protein has been linked to several
CC disease such as atherosclerosis, restenosis, inflammation and other
CC vascular diseases. Compounds which inhibit the activity of TLR-4, through
CC the inhibition of its receptor, may have vasotropic,
CC antiarteriosclerotic, thrombolytic, cardiant and antiinflammatory
CC activities. This may also be achieved through antisense therapy or gene
CC therapy. The method or the system of the invention may therefore be
CC useful for inhibiting or treating a vascular disease, for example
CC atherosclerosis, transplant atherosclerosis, vein-graft atherosclerosis,
CC thrombosis, restenosis, stent restenosis, angioplasty restenosis, or
CC inflammation and other heart disease. The present sequence is that of a
CC PCR primer which was used for reverse transcription polymerase chain
CC reaction amplification of human TLR-4 in the exemplification of the
CC invention.
XX
SQ Sequence 19 BP; 5 A; 6 C; 5 G; 3 T; 0 U; 0 Other;

Query Match 0.5%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 86;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2256 GAAGGGGTGCCTCCATTTC 2274
||||||||||||||||||||
Db 19 GAAGGGGTGCCTCCATTTC 1

RESULT 101
ADI53115/c
ID ADI53115 standard; DNA; 19 BP.
XX
AC ADI53115;
XX
DT 22-APR-2004 (first entry)
XX
DE Human Toll-like receptor 4 TLR-4 RT-PCR primer #2.
XX
KW ss; RT-PCR; reverse transcriptase; primer;
KW myeloid differentiation factor 88; MyD88; atherosclerosis; thrombosis;
KW restenosis; angina pectoris; ischaemia; stroke; heart attack;
KW osteonecrosis; colitis; poor kidney function; congestive heart failure;
KW poor blood circulation; slow wound healing; inflammation; infection;
KW claudication; Toll-like receptor 4; TLR-4; human.
XX
OS Homo sapiens.
XX
PN US2003148986-A1.
XX
PD 07-AUG-2003.
XX
PF 12-DEC-2002; 2002US-00317992.
XX
PR 17-DEC-2001; 2001US-0341359P.
PR 23-APR-2002; 2002US-00128166.
XX
PA (CEDA-) CEDARS SINAI MEDICAL CENT.
XX
PI Arditi M, Rajavashisth T, Shah PK;
XX
DR WPI; 2003-897598/82.
XX
PT A system for inhibiting the biological activity of myeloid
PT differentiation factor 88 (MyD88), useful for treating vascular diseases
PT (e.g. atherosclerosis), comprises an intravascular device and MyD88
PT inhibitor coated on the device.
XX
PS Example 6; SEQ ID NO 4; 18pp; English.
XX
CC The invention relates to a system for inhibiting the biological activity
CC of myeloid differentiation factor 88 (MyD88) which comprises an
CC intravascular device and a therapeutic composition coated upon the
CC intravascular device, the composition comprising a MyD88 inhibitor. The
CC system or method is useful for treating vascular diseases including
CC atherosclerosis, transplant atherosclerosis, vein-graft atherosclerosis,
CC thrombosis, restenosis, stent restenosis or angioplasty restenosis. It
CC can be used for treating patients suffering from angina pectoris,
CC ischaemias, conditions associated with ischaemias including stroke,
CC transient ischaemic attacks, heart attack, osteonecrosis, colitis, poor
CC kidney function or congestive heart failure, poor blood circulation to
CC the extremities and complications of poor blood circulation including
CC slow wound healing, inflammation, infections and claudication. The
CC present sequence represents a human Toll-like receptor 4 TLR-4 reverse
CC transcriptase (RT)-PCR primer.
XX
SQ Sequence 19 BP; 5 A; 6 C; 5 G; 3 T; 0 U; 0 Other;

Query Match 0.5%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 86;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2256 GAAGGGGTGCCTCCATTTC 2274
||||||||||||||||||||
Db 19 GAAGGGGTGCCTCCATTTC 1

RESULT 102
ACC74142/c
ID ACC74142 standard; DNA; 24 BP.
XX
AC ACC74142;
XX
DT 11-JUL-2003 (first entry)
XX
DE Reverse primer for detecting murine TLR4 expression.
XX
KW Mouse; immunomodulator; antibacterial; immunosuppressive; CSF-1;
KW colony stimulating factor-1; septic shock; TLR; toll-like receptor;

KW interleukin-12; IL-12; HPRT; hypoxanthine phosphoribosyl transferase;
KW PCR; primer; ss.
XX
OS Mus sp.
XX
PN WO2003028752-A1.
XX
PD 10-APR-2003.
XX
PF 03-OCT-2002; 2002WO-AU001348.
XX
PR 03-OCT-2001; 2001AU-00008071.
XX
PA (UYQU) UNIV QUEENSLAND.
XX
PI Hume DA, Sweet MJ, Stacey KJ, Sester DP;
XX
DR WPI; 2003-381587/36.
XX
PT Modulating an immune response in an animal, useful for the prophylactic
PT or therapeutic treatment of bacterially-induced septic shock, by
PT modulating colony stimulating factor-1 (CSF-1) activity in an animal.
XX
PS Example; Page 18-19; 58pp; English.
XX
CC The invention relates to modulating an immune response in an animal. The
CC method of the invention comprises modulating colony stimulating factor-1
CC (CSF-1) activity in order to modulate the immune response of the animal.
CC Also disclosed is a pharmaceutical composition comprising a modulator of
CC CSF-1 activity and a pharmaceutical carrier. The method or the
CC pharmaceutical composition is useful for the prophylactic or therapeutic
CC treatment of bacterially-induced septic shock. The sequences given in
CC records ACC74129-ACC74161 represent primers and probes used in an example
CC from the invention to detect murine genes
XX
SQ Sequence 24 BP; 7 A; 4 C; 5 G; 8 T; 0 U; 0 Other;

Query Match 0.5%; Score 18.8; DB 1; Length 24;
Best Local Similarity 90.9%; Pred. No. 1.3e+02;
Matches 20; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 625 AACTTAATGTGGCTCACAATCT 646
|||| ||||||||||||||| |
Db 22 AACTCAATGTGGCTCACAATTT 1

RESULT 103
ADF17210/c
ID ADF17210 standard; DNA; 20 BP.
XX
AC ADF17210;
XX
DT 12-FEB-2004 (first entry)
XX
DE Human toll-like receptor 4 (TLR4) gene PCR primer #4.
XX
KW therapeutic agent; endothelial disorder; 3-amino-1;
KW 2-benzisothiazole compound; endothelial disorders; toxaemia;
KW severe toxaemia; toxic shock; haemorrhagic shock;
KW alcohol induced cirrhosis; adult respiratory distress syndrome;
KW chronic rheumatoid arthritis; ulcerative gastritis; Crohn's disease;
KW glomerulonephritis; infectious carditis; systemic lupus erythematosus;
KW scleroderma; Sjoegren's syndrome; multiple organ failure;
KW autoimmune disease; multiple sclerosis; PCR; primer; ss; human;
KW toll-like receptor 4; TLR4.
XX
OS Homo sapiens.
XX
PN WO2003087072-A1.
XX
PD 23-OCT-2003.
XX
PF 31-MAR-2003; 2003WO-JP004108.
XX
PR 29-MAR-2002; 2002JP-00132121.
XX
PA (MOCH) MOCHIDA PHARM CO LTD.
XX
PI Furusako S, Satoh T, Nakamura M, Mizuno M, Mori S;
XX
DR WPI; 2003-903121/82.
XX
PT Agents for treating diseases associated with endothelial disorders,
PT toxemia or toll like receptor signaling comprise new or known 3-amino-1,2
PT -benzisothiazole compounds.
XX
PS Example 4; SEQ ID NO 7; 180pp; Japanese.
XX
CC The invention comprises therapeutic agents for preventing or treating
CC diseases associated with endothelial disorders, the agents contain a 3-
CC amino-1,2-benzisothiazole compound. The therapeutic agents of the
CC invention are useful for preventing/treating: diseases associated with
CC endothelial disorders, toxaemia, severe toxaemia, toxic shock,
CC haemorrhagic shock, alcohol induced cirrhosis, adult respiratory distress
CC syndrome, chronic rheumatoid arthritis, ulcerative gastritis, Crohn's
CC disease, glomerulonephritis, infectious carditis, systemic lupus
CC erythematosus, scleroderma, Sjoegren's syndrome, multiple organ failure
CC or autoimmune diseases (e.g. multiple sclerosis). The present DNA
CC sequence represents a PCR primer that was used in the exemplification of
CC the invention.
XX
SQ Sequence 20 BP; 4 A; 6 C; 3 G; 7 T; 0 U; 0 Other;

Query Match 0.5%; Score 18.4; DB 1; Length 20;
Best Local Similarity 95.0%; Pred. No. 1.1e+02;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 2784 GCTAAGGGTGAGTAATTCCA 2803
|||||||||||||||| ||||
Db 20 GCTAAGGGTGAGTAAATCCA 1

RESULT 104
ADP98293/c
ID ADP98293 standard; DNA; 24 BP.
XX
AC ADP98293;
XX
DT 23-SEP-2004 (first entry)
XX
DE C. albicans specific gene, orf6.2403, identification primer B.
XX
KW Diploid fungal cell; allele; gene disruption cassette;
KW promoter replacement fragment; antifungal; fungicide; gene therapy;
KW infection; Candida albicans; identification; primer; ss.
XX
OS Candida albicans.
OS Unidentified.
XX
PN WO2004056965-A2.
XX
PD 08-JUL-2004.
XX
PF 19-DEC-2003; 2003WO-US040618.
XX
PR 19-DEC-2002; 2002US-0434832P.
XX
PA (ELIT-) ELITRA PHARM INC.
PA (ELIT-) ELITRA CANADA LTD.
XX
PI Roemer T, Jiang B, Boone C, Bussey H;
XX
DR WPI; 2004-500296/47.
XX
PT Constructing a strain of diploid fungal cells in which both alleles of a
PT gene are modified comprises modifying the alleles of a gene in the fungal

PT cells by recombination using a gene disruption cassette and a promoter
PT replacement fragment.
XX
PS Claim 36; SEQ ID NO 5088; 163pp; English.
XX
CC The invention relates to a novel method for constructing a strain of
CC diploid fungal cells in which both alleles of a gene are modified. The
CC method comprises modifying the alleles of a gene in diploid fungal cells
CC by recombination using a gene disruption cassette and a promoter
CC replacement fragment. The invention further comprises: assembling a
CC collection of diploid fungal cells each of which comprises modified
CC alleles of a different gene; a strain of diploid fungal cells comprising
CC modified alleles of a gene, where the first allele of the gene is
CC inactivated by a gene disruption cassette comprising a nucleotide
CC sequence encoding an expressible selectable marker; and the expression of
CC the second allele of the gene is regulated by a heterologous promoter
CC that is operably linked to the coding region of the second allele of the
CC gene, and where the gene encodes the polypeptide mentioned above; a
CC collection of diploid fungal strains comprising the diploid strains cited
CC above, where substantially all the different genes that encode the above
CC amino acid sequences are modified and are present in different diploid
CC strains in the collection; a nucleic acid molecule microarray comprising
CC nucleic acid molecules, where each nucleic acid molecule comprises a
CC nucleotide sequence that is hybridizable to a target nucleotide sequence
CC comprising any of the 310 nucleotide sequences listed in the
CC specification (ADP98516-ADP98825); identifying a gene that is essential
CC to the survival or growth of a fungus, that contributes to the virulence
CC and/or pathogenicity of a fungus, or that contributes to the resistance
CC of a diploid fungus to an antifungal agent; identifying an antifungal
CC agent that inhibits the growth of a diploid fungus, or a therapeutic
CC agent for treatment of a mammalian disease; correlating changes in the
CC levels of proteins or gene transcripts with the inhibition of growth or
CC proliferation of a diploid fungal cell; a purified or isolated nucleic
CC acid molecule comprising a nucleotide sequence encoding a gene product
CC required for proliferation of Candida albicans, where the gene product
CC consists of any of the above-mentioned amino acid sequences; a vector
CC comprising a promoter operably linked to the nucleic acid molecule cited
CC above; a host cell containing the vector; a purified or isolated
CC polypeptide comprising any of the 61 amino acid sequences given in the
CC specification (ADP96718-ADP96778); a fusion protein comprising a fragment
CC of a first polypeptide fused to a second polypeptide, the fragment
CC consisting of at least 6 consecutive residues of any of ADP98826-ADP99135
CC ; producing a polypeptide; identifying a compound which modulates the
CC activity of a gene product encoded by a nucleic acid comprising any of
CC ADP98516-ADP98825; eliciting an immune response in an animal; a strain of
CC Candida albicans, where a first allele of a gene comprising any of
CC ADP98516-ADP98825 is inactive and a second allele of the gene is under
CC the control of a heterologous promoter; identifying a compound or binding
CC partner that binds to the polypeptide comprising any of ADP98826-
CC ADP99135, or its fragment; identifying a compound having the ability to
CC inhibit growth or proliferation of Candida albicans; inhibiting growth or
CC proliferation of Candida albicans cells; manufacturing an antimycotic
CC compound; treating an infection of a subject by Candida albicans;
CC preventing or containing contamination of an object by Candida albicans,
CC or for preventing or inhibiting formation on a surface of a biofilm
CC comprising Candida albicans; a pharmaceutical composition comprising a
CC therapeutic amount of an agent which reduces the activity or level of a
CC gene product encoded by a nucleic acid comprising any of ADP98516-
CC ADP98825 in a pharmaceutical carrier; an antibody preparation which binds
CC the polypeptide; methods for evaluating a compound against a target gene
CC product encoded by any of ADP98516-ADP98825; identifying an antimycotic
CC compound; a computer or a computer readable medium that comprises at
CC least one of the nucleotide sequences mentioned in the specification or
CC at least one amino acid sequence selected from ADP98826-ADP99135; a
CC method assisted by a computer for identifying a putatively essential gene
CC of a fungus; and a protein array comprising proteins, where at least one
CC protein comprises an amino acid sequence or a portion of an amino acid
CC sequence selected from ADP98516-ADP98825. The novel methods and
CC compositions have fungicide activity. The compositions may be used in
CC gene therapy. The composition and methods are useful for drug screening
CC purposes or for diagnosing, preventing or treating infections associated
CC with Candida albicans. These may also be used for constructing strains
CC useful for identification and validation of gene products as effective
CC targets for therapeutic intervention, for identifying and validating gene
CC products as effective targets for therapeutic intervention, and for
CC collecting identified essential genes. This polynucleotide sequence
CC represents an identification primer used in the exemplification of the
CC invention. NOTE: This sequence was downloaded from an electronic sequence
CC listing provided on the WIPO website.
XX
SQ Sequence 24 BP; 2 A; 3 C; 7 G; 12 T; 0 U; 0 Other;

Query Match 0.5%; Score 18.2; DB 1; Length 24;
Best Local Similarity 87.0%; Pred. No. 1.5e+02;
Matches 20; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 488 ATTGACAGGAAACCCCATCCAGA 510
|| |||| |||| ||||||||||
Db 23 ATCGACAAGAAAACCCATCCAGA 1

RESULT 105
AAC84790
ID AAC84790 standard; DNA; 18 BP.
XX
AC AAC84790;
XX
DT 20-APR-2001 (first entry)
XX
DE Human TLR4 gene exon 4 amplifying forward primer.
XX
KW TLR4; toll receptor 4; innate immunity; gram-negative bacteria; sepsis;
KW respiratory distress syndrome; LPS; lipopolysaccharide; asthma; ARDS;
KW chronic airway disease; arthritis; inflammatory disease; SIRS; human;
KW systematic inflammatory response syndrome; pyelonephritis; bronchitis;
KW acute respiratory distress syndrome; gall bladder disease; pneumonia;
KW cystic fibrosis; antibacterial; antiinflammatory; PCR primer; ss.
XX
OS Homo sapiens.
XX
PN WO200077204-A1.
XX
PD 21-DEC-2000.
XX
PF 08-JUN-2000; 2000WO-US015723.
XX
PR 10-JUN-1999; 99US-00329515.
XX
PA (IOWA) UNIV IOWA RES FOUND.
PA (LORE/) LORENZ E.
XX
PI Lorenz E, Schwartz DA, Schutte BC;
XX
DR WPI; 2001-061872/07.
XX
PT Identifying humans at risk of, or having indication associated with
PT altered innate immunity involves detecting or determining whether DNA
PT amplified from a biological sample encodes a portion of variant toll
PT receptor 4.
XX
PS Example 1; Page 31; 97pp; English.
XX
CC The invention relates to human toll receptor 4 (TLR4) nucleic acid and
CC methods to identify polymorphisms at the human TLR4 locus and to identify
CC individuals at risk of, or having, an indication associated with altered
CC innate immunity. A variant TLR4 nucleic acid is useful as a diagnostic
CC reagent for detecting a polymorphism in human TLR4 gene. Since the
CC presence of TLR4 mutation is associated with gram-negative sepsis,
CC severity of sepsis, pre-term delivery and respiratory distress syndrome
CC in pre-term infants, agents which alter TLR4 activity are useful for
CC preventing or ameliorating infection by gram-negative bacteria, sepsis
CC induced by gram-negative bacteria, LPS (lipopolysaccharide) induced
CC chronic airway disease, asthma, arthritis, local and systemic
CC inflammatory disease conditions such as systematic inflammatory response
CC syndrome (SIRS) or acute respiratory distress syndrome (ARDS),
CC pyelonephritis, gall bladder disease, pneumonia, bronchitis, chronic

```
CC   obstructive pulmonary disease, local gram-negative bacterial infection
CC   and cystic fibrosis. Sequences AAC84776-823 represent PCR primers for
CC   amplifying the exons of human TLR4 gene
XX
SQ   Sequence 18 BP; 3 A; 4 C; 3 G; 8 T; 0 U; 0 Other;

  Query Match             0.5%;  Score 18;  DB 1;  Length 18;
  Best Local Similarity   100.0%;  Pred. No. 1e+02;
  Matches   18;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1763 TTCATTGGATACGTTTCC 1780
              ||||||||||||||||||
Db          1 TTCATTGGATACGTTTCC 18


RESULT 106
AAV51439/c
ID   AAV51439 standard; DNA; 22 BP.
XX
AC   AAV51439;
XX
DT   02-FEB-1999  (first entry)
XX
DE   Zea mays genome forward PCR primer #39.
XX
KW   Polymorphic marker; allele-specific; probe; amplification; PCR primer;
KW   hybridisation; plant; hybrid certification; genetic contribution;
KW   progeny; back-cross; hybrid; ancestry; corn; ss.
XX
OS   Synthetic.
OS   Zea mays.
XX
PN   WO9824796-A1.
XX
PD   11-JUN-1998.
XX
PF   01-DEC-1997;   97WO-US021782.
XX
PR   02-DEC-1996;   96US-0032069P.
PR   07-MAR-1997;   97US-00813507.
XX
PA   (AFFY-) AFFYMETRIX INC.
XX
PI   Lemieux B,  Landry BS,  Sapolsky RJ,  Murigneux A;
XX
DR   WPI; 1998-333252/29.
XX
PT   Brassica species allele-specific oligonucleotide probes and primers -
PT   useful for plant breeding.
XX
PS   Example 1; Page 50; 65pp; English.
XX
CC   AAV51401-V51704 are forward PCR primers used to amplify fragments of the
CC   Zea mays genome in order to detect polymorphic markers. Such markers can
CC   be used in the construction of allele-specific primers and probes for
CC   amplification or hybridisation, e.g. to determine common or disparate
CC   ancestry between 2 or more plants, to monitor the genetic contribution of
CC   an ancestral plant, to trace the progeny of proprietary plants, in
CC   certification of a hybrid plant or to identify the progeny of a back-
CC   crossed plant with an ancestral plant
XX
SQ   Sequence 22 BP; 10 A; 5 C; 5 G; 2 T; 0 U; 0 Other;

  Query Match             0.5%;  Score 17.4;  DB 1;  Length 22;
  Best Local Similarity   94.7%;  Pred. No. 1.6e+02;
  Matches   18;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       3558 TTTCCGCTTCCTGGTCTTA 3576
              ||||||||| |||||||||
Db         19 TTTCCGCTTACTGGTCTTA 1


RESULT 107
ABK88343/c
ID   ABK88343 standard; DNA; 22 BP.
XX
AC   ABK88343;
XX
DT   07-OCT-2002  (first entry)
XX
DE   Synthetic TLR4 PCR primer #6.
XX
KW   Endotoxin shock; bacterial infection; TLR4; PCR; primer; ss.
XX
OS   Synthetic.
XX
PN   JP2002176986-A.
XX
PD   25-JUN-2002.
XX
PF   14-DEC-2000; 2000JP-00380561.
XX
PR   14-DEC-2000; 2000JP-00380561.
XX
PA   (NAGO-) ZH NAGOYA SANGYO KAGAKU KENKYUSHO.
XX
DR   WPI; 2002-569945/61.
XX
PT   An anti-bacterial protein useful for avoiding endotoxin shock caused by
PT   bacterial infection.
XX
PS   Disclosure; Page 6; 16pp; Japanese.
XX
CC   The present invention relates to a new protein that can be used for
CC   avoiding endotoxin shock caused by bacterial infection. The present
CC   nucleic acid sequence represents one of a collection (ABK88338-ABK88345)
CC   of synthetic TLR4 PCR primers that were used in the methods of the
CC   invention
XX
SQ   Sequence 22 BP; 4 A; 9 C; 1 G; 8 T; 0 U; 0 Other;

  Query Match             0.5%;  Score 17.2;  DB 1;  Length 22;
  Best Local Similarity   86.4%;  Pred. No. 1.7e+02;
  Matches   19;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       2225 GGTAAGGAATGAGCTAGTAAAG 2246
              ||| || |||||||| ||||||
Db         22 GGTGAGAAATGAGCTGGTAAAG 1


RESULT 108
ADG17647/c
ID   ADG17647 standard; DNA; 22 BP.
XX
AC   ADG17647;
XX
DT   26-FEB-2004  (first entry)
XX
DE   Mouse toll-like receptor (TLR) 4 RT-PCR primer SeqID9.
XX
KW   differentiation; osteoclast precursor cell; Toll-like receptor ligand;
KW   TLR ligand; osteopathic; gene therapy; bone loss; bacterial infection;
KW   PCR; primer; ss; RT-PCR; reverse transcription PCR; mouse; murine.
XX
OS   Mus sp.
XX
PN   WO2003094857-A2.
XX
PD   20-NOV-2003.
XX
PF   12-MAY-2003; 2003WO-US014946.
XX
PR   10-MAY-2002; 2002US-0379941P.
PR   14-APR-2003; 2003US-0462859P.
XX
PA   (UYPE-) UNIV PENNSYLVANIA.
```

```
XX
PI   Choi Y;
XX
DR   WPI; 2003-903937/82.
XX
PT   Inhibiting differentiation of an osteoclast precursor cell, useful for
PT   treating bone diseases, comprises contacting the cell with a Toll-like
PT   receptor (TLR) ligand that stimulates a TLR on the osteoclast precursor
PT   cell.
XX
PS   Example; SEQ ID NO 9; 72pp; English.
XX
CC   This invention relates to a novel method of inhibiting differentiation of
CC   an osteoclast precursor cell comprises contacting the cell with at least
CC   one Toll-like receptor (TLR) ligand, where the TLR ligand stimulates at
CC   least one TLR on the osteoclast precursor cell, thus, inhibiting
CC   differentiation of the osteoclast precursor cell. The invention may be
CC   useful for the development of compounds with an osteopathic activity or
CC   for gene therapy. The composition and methods are useful in inhibiting
CC   differentiation of an osteoclast precursor cell which may be used in the
CC   development of therapies to treat patients suffering from bone loss
CC   associated with bacterial infection and bone loss resulting from other
CC   diseases. These may also be used in identifying a Toll-like receptor that
CC   inhibits differentiation of an osteoclast precursor cell. The present
CC   sequence is that of a mouse toll-like receptor (TLR) RT-PCR primer which
CC   was used in the exemplification of the invention.
XX
SQ   Sequence 22 BP; 4 A; 9 C; 1 G; 8 T; 0 U; 0 Other;

  Query Match             0.5%;  Score 17.2;  DB 1;  Length 22;
  Best Local Similarity   86.4%;  Pred. No. 1.7e+02;
  Matches   19;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       2225 GGTAAGGAATGAGCTAGTAAAG 2246
              ||| || |||||||| ||||||
Db         22 GGTGAGAAATGAGCTGGTAAAG 1


RESULT 109
AAX21943/c
ID   AAX21943 standard; DNA; 20 BP.
XX
AC   AAX21943;
XX
DT   18-MAY-1999  (first entry)
XX
DE   Human B-raf kinase antisense oligonucleotide Isis#14142.
XX
KW   Antisense oligonucleotide; B-raf; human; inhibitor; T-cell activation;
KW   hyperproliferative disorder; cancer; restenosis; psoriasis;
KW   atherosclerosis; raf-associated tumour; diagnosis; therapy; ss.
XX
OS   Synthetic.
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   modified_base    1. .20
FT                    /*tag=  a
FT                    /note= "phosphorothioate bases"
XX
PN   WO9902167-A1.
XX
PD   21-JAN-1999.
XX
PF   06-JUL-1998;   98WO-US013961.
XX
PR   07-JUL-1997;   97US-00888982.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Monia BP;
XX
DR   WPI; 1999-120502/10.
XX
PT   New antisense oligonucleotides - for modulation of human B-raf gene
PT   expression.
XX
PS   Disclosure; Page 22; 72pp; English.
XX
CC   This sequence represents an example of an antisense oligonucleotide of
CC   the invention. The oligonucleotides are 8-50 nucleotides in length, and
CC   are targeted to a nucleic acid encoding human B-raf and which is capable
CC   of inhibiting human B-raf expression. The oligonucleotides is used to
CC   inhibit the (abnormal) expression of human B-raf, to inhibit
CC   hyperproliferation of cells, to treat or prevent an abnormal
CC   proliferative condition, e.g. hyperproliferative disorders such as cancer
CC   (e.g. of the brain or nervous system), restenosis, psoriasis or a
CC   disorder characterised by T-cell activation and growth. They may also be
CC   used to diagnose these diseases, as well as atherosclerosis. The
CC   oligonucleotides of the invention may be used to distinguish raf-
CC   associated tumours from tumours having other etiologies. The antisense
CC   oligonucleotides can also be used to quantify raf expression in assays
XX
SQ   Sequence 20 BP; 3 A; 6 C; 1 G; 10 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 17;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1.5e+02;
  Matches   17;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1465 TGAAACAAATGAGTGAG 1481
              |||||||||||||||||
Db         20 TGAAACAAATGAGTGAG 4


RESULT 110
AAD44802/c
ID   AAD44802 standard; DNA; 20 BP.
XX
AC   AAD44802;
XX
DT   13-DEC-2002  (first entry)
XX
DE   Human B-raf kinase antisense oligonucleotide ISIS #14142.
XX
KW   Human; raf; hyperproliferation; neovascularisation; ocular angiogenesis;
KW   therapy; cancer; cytostatic; anti-angiogenic; vascular; ophthalmological;
KW   antisense; phosphorothioate backbone; B-raf kinase; ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base    1. .20
FT                    /*tag=  a
FT                    /mod_base= OTHER
FT                    /note= "Phosphorothioate backbone"
XX
PN   US6410518-B1.
XX
PD   25-JUN-2002.
XX
PF   18-FEB-2000; 2000US-00506073.
XX
PR   31-MAY-1994;   94US-00250856.
PR   31-MAY-1995;   95WO-US007111.
PR   26-NOV-1996;   96US-00756806.
PR   07-JUL-1997;   97US-00888982.
PR   06-JUL-1998;   98WO-US013961.
PR   28-AUG-1998;   98US-00143214.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Monia BP;
XX
DR   WPI; 2002-597918/64.
XX
```

PT Treating cancer, angiogenesis or neovascularization by administering
PT antisense oligonucleotides targeted to human raf sequences.
XX
PS Example 18; Col 26; 41pp; English.
XX
CC The present invention relates to novel antisense oligonucleotides which
CC are targetted to nucleic acids encoding human raf proteins and capable of
CC inhibiting raf expression. The invention also relates to methods of
CC inhibiting hyperproliferation of cells which involves contacting the
CC hyperproliferating cells with a therapeutically effective amount of an
CC oligonucleotide of the invention. The method is useful for treating
CC cancer, angiogenesis or neovascularisation, especially ocular
CC angiogenesis or neovascularisation. The present DNA sequence is an
CC antisense oligonucleotide targetted to human B-raf kinase
XX
SQ Sequence 20 BP; 3 A; 6 C; 1 G; 10 T; 0 U; 0 Other;

Query Match 0.4%; Score 17; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.5e+02;
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1465 TGAAACAAATGAGTGAG 1481
||||||||||||||||
Db 20 TGAAACAAATGAGTGAG 4

RESULT 111
ADF09796/c
ID ADF09796 standard; DNA; 20 BP.
XX
AC ADF09796;
XX
DT 12-FEB-2004 (first entry)
XX
DE Human b-raf kinase antisense oligonucleotide seq id 65.
XX
KW tumour metastasis; human; raf; raf expression inhibitor; cytostatic;
KW antiarteriosclerotic; antisense-therapy; hyperproliferative disorder;
KW atherosclerosis; tumour; b-raf kinase; antisense oligonucleotide; ss.
XX
OS Homo sapiens.
XX
PN US2003119769-A1.
XX
PD 26-JUN-2003.
XX
PF 14-JUN-2002; 2002US-00173225.
XX
PR 31-MAY-1994; 94US-00250856.
PR 31-MAY-1995; 95WO-US007111.
PR 26-NOV-1996; 96US-00756806.
PR 07-JUL-1997; 97US-00888982.
PR 06-JUL-1998; 98WO-US013961.
PR 28-AUG-1998; 98US-00143214.
PR 18-FEB-2000; 2000US-00506073.
PR 25-JAN-2002; 2002US-00057550.
XX
PA (MONI/) MONIA B P.
XX
PI Monia BP;
XX
DR WPI; 2003-863446/80.
XX
PT Preventing and/or treating conditions associated with raf expression,
PT such as hyperproliferative disorders, atherosclerosis and tumors, using
PT antisense oligonucleotide modulation of human raf gene expression.
XX
PS Example 18; SEQ ID NO 92; 41pp; English.
XX
CC The invention describes a method of preventing or treating tumour
CC metastasis in an animal comprising administering to the animal an
CC oligonucleotide 8-50 nucleotides in length, which is targeted to mRNA
CC encoding human raf and capable of inhibiting raf expression. Also
CC disclosed are raf oligonucleotides, nucleic acids, proteins and
CC compositions used in the methods of the invention. The oligonucleotides
CC have cytostatic and antiarteriosclerotic properties, are useful as Raf-
CC inhibitors and in antisense-therapy. The methods and compositions of the
CC present invention are useful for preventing and/or treating conditions
CC associated with raf expression, such as hyperproliferative disorders,
CC atherosclerosis and tumours. This sequence represents a human b-raf
CC kinase antisense oligonucleotide.
XX
SQ Sequence 20 BP; 3 A; 6 C; 1 G; 10 T; 0 U; 0 Other;

Query Match 0.4%; Score 17; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.5e+02;
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1465 TGAAACAAATGAGTGAG 1481
||||||||||||||||
Db 20 TGAAACAAATGAGTGAG 4

RESULT 112
ACD42185/c
ID ACD42185 standard; DNA; 20 BP.
XX
AC ACD42185;
XX
DT 05-SEP-2003 (first entry)
XX
DE Antisense oligonucleotide targeting human b-raf, ISIS14142.
XX
KW Human; ss; antisense; c-raf; a-raf; b-raf; protein kinase; cancer;
KW signal transduction; cell proliferation; lung carcinoma; cytostatic;
KW antisense gene therapy; chemotherapeutic agent; angiogenesis;
KW hyperproliferative condition; neovascularisation; ocular angiogenesis.
XX
OS Homo sapiens.
XX
PN US2003032607-A1.
XX
PD 13-FEB-2003.
XX
PF 25-JAN-2002; 2002US-00057550.
XX
PR 31-MAY-1994; 94US-00250856.
PR 31-MAY-1995; 95WO-US007111.
PR 26-NOV-1996; 96US-00756806.
PR 07-JUL-1997; 97US-00888982.
PR 06-JUL-1998; 98WO-US013961.
PR 28-AUG-1998; 98US-00143214.
PR 18-FEB-2000; 2000US-00506073.
XX
PA (MONI/) MONIA B P.
XX
PI Monia BP;
XX
DR WPI; 2003-503332/47.
XX
PT Novel antisense oligonucleotide which is targeted to mRNA encoding human
PT raf and which is capable of inhibiting raf expression, useful for
PT treating or preventing hyperproliferative conditions such as cancer.
XX
PS Example 18; Page 14; 42pp; English.
XX
CC The invention relates to an oligonucleotide 8-50 nucleotides in length
CC which is targeted to mRNA encoding human c-raf, a-raf or b-raf (raf is a
CC protein kinase playing a regulatory role in signal transduction,
CC regulating cell proliferation and has been implicated in lung carcinoma),
CC and which is capable of inhibiting raf expression. Also included is a
CC composition comprising the oligonucleotide and a pharmaceutically
CC acceptable carrier. The antisense oligonucleotide is useful for
CC inhibiting the expression of human raf in human cells or tissues, by
CC contacting the human cells or tissues with the oligo. The oligo. is also
CC is useful for treating or preventing a disease or condition associated

```
CC   with the expression of raf by administering it in combination with a
CC   chemotherapeutic agent to a human or cells of the human, where the
CC   expression of raf is abnormal expression, and the condition is a
CC   hyperproliferative condition such as cancer, angiogenesis or
CC   neovascularisation (preferably ocular angiogenesis or
CC   neovascularisation). The oligo. is also useful for inhibiting
CC   hyperproliferation of cells. The oligos. are also useful as tools, for
CC   example for detecting and determining the role of raf expression in
CC   various cell functions and physiological processes and conditions and for
CC   diagnosing conditions associated with raf expression and for research
CC   purposes. The present sequence is an antisense oligonucleotide targeting
CC   a human raf mRNA
XX
SQ   Sequence 20 BP; 3 A; 6 C; 1 G; 10 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 17;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1.5e+02;
  Matches   17;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1465 TGAAACAAATGAGTGAG 1481
              |||||||||||||||||
Db         20 TGAAACAAATGAGTGAG 4


RESULT 113
AAV37060/c
ID   AAV37060 standard; DNA; 20 BP.
XX
AC   AAV37060;
XX
DT   04-SEP-1998  (first entry)
XX
DE   PCR primer for antibiotic resistance gene aac6'-IIa.
XX
KW   Detection; bacterial antibiotic resistance gene; bacteria;
KW   fungal species; identification; PCR primer; ss.
XX
OS   Synthetic.
XX
PN   WO9820157-A2.
XX
PD   14-MAY-1998.
XX
PF   04-NOV-1997;   97WO-CA000829.
XX
PR   04-NOV-1996;   96US-00743637.
XX
PA   (IDII-) IDI INFECTIO DIAGNOSTIC INC.
XX
PI   Bergeron MG,  Picard FJ,  Ouellette M,  Roy PH;
XX
DR   WPI; 1998-286967/25.
XX
PT   Use of oligo:nucleotide primers and probes - for detection,
PT   identification and quantification of bacteria, fungi and bacterial
PT   antibiotic resistance gene(s).
XX
PS   Claim 21; Page 93; 167pp; English.
XX
CC   PCR primers AAV37060-61 and AAV37062-63 are used to amplify antibiotic
CC   resistance gene aac6'-IIa. They are used in the course of the invention.
CC   The specification describes the use of probes and/or amplification
CC   primers which are specific, ubiquitous and sensitive for determining the
CC   presence and amount of nucleic acids from a bacterial antibiotic
CC   resistance gene and specific bacterial and fungal species in any sample
CC   suspected of containing the bacterial or fungal nucleic acids, where each
CC   of the nucleic acid or variant or part comprises a selected target region
CC   hybridisable with the probes or primers. The method of use comprises
CC   contacting the sample with the probes or primers and detecting the
CC   presence of hybridised probes or amplified products as an indication of
CC   the presence of the specific bacterial or fungal species and bacterial
CC   antibiotic resistance genes. The methods and products can be used to
CC   detect and identify the bacterial and fungal species and genera and
CC   determine the bacterial resistance to antibiotics
XX
SQ   Sequence 20 BP; 4 A; 3 C; 7 G; 6 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 16.8;  DB 1;  Length 20;
  Best Local Similarity   90.0%;  Pred. No. 1.6e+02;
  Matches   18;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       2378 CCAGCACTTCATCCAGAGCC 2397
              |||||||||||||| |||| |
Db         20 CCAGCACTTCATCAAGAGTC 1


RESULT 114
ACC74158
ID   ACC74158 standard; DNA; 20 BP.
XX
AC   ACC74158;
XX
DT   11-JUL-2003  (first entry)
XX
DE   Forward primer TLR4 for semi-quantitative PCR.
XX
KW   Mouse; immunomodulator; antibacterial; immunosuppressive; CSF-1;
KW   colony stimulating factor-1; septic shock; TLR; toll-like receptor;
KW   interleukin-12; IL-12; HPRT; hypoxanthine phosphoribosyl transferase;
KW   PCR; primer; ss.
XX
OS   Mus sp.
XX
PN   WO2003028752-A1.
XX
PD   10-APR-2003.
XX
PF   03-OCT-2002; 2002WO-AU001348.
XX
PR   03-OCT-2001; 2001AU-00008071.
XX
PA   (UYQU ) UNIV QUEENSLAND.
XX
PI   Hume DA,  Sweet MJ,  Stacey KJ,  Sester DP;
XX
DR   WPI; 2003-381587/36.
XX
PT   Modulating an immune response in an animal, useful for the prophylactic
PT   or therapeutic treatment of bacterially-induced septic shock, by
PT   modulating colony stimulating factor-1 (CSF-1) activity in an animal.
XX
PS   Example; Page 19; 58pp; English.
XX
CC   The invention relates to modulating an immune response in an animal. The
CC   method of the invention comprises modulating colony stimulating factor-1
CC   (CSF-1) activity in order to modulate the immune response of the animal.
CC   Also disclosed is a pharmaceutical composition comprising a modulator of
CC   CSF-1 activity and a pharmaceutical carrier. The method or the
CC   pharmaceutical composition is useful for the prophylactic or therapeutic
CC   treatment of bacterially-induced septic shock. The sequences given in
CC   records ACC74129-ACC74161 represent primers and probes used in an example
CC   from the invention to detect murine genes
XX
SQ   Sequence 20 BP; 4 A; 2 C; 9 G; 5 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 16.8;  DB 1;  Length 20;
  Best Local Similarity   90.0%;  Pred. No. 1.6e+02;
  Matches   18;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        548 ACAGAAGCTGGTGGCTGTGG 567
              | |||| ||||||||||||||
Db          1 AGAGAATCTGGTGGCTGTGG 20


RESULT 115
ADD93829
```

ID ADD93829 standard; DNA; 20 BP.
XX
AC ADD93829;
XX
DT 29-JAN-2004 (first entry)
XX
DE Mouse AF06972 (mAF06972) RT-PCR primer, SEQ ID NO:18.
XX
KW Mouse; murine; AF06972; mAF06972; HJ06972; KIAA1079; AATYK homologue;
KW apoptosis-associated tyrosine kinase; apoptosis;
KW nerve cell differentiation; nerve cell proliferation; nerve cell growth;
KW nerve cell division; drug screening; transgenic animal;
KW apoptosis disorder; nerve regeneration; neurological disorder; hepatitis;
KW hepatotropic; anti-inflammatory; virucide; cytostatic;
KW reverse transcription-PCR; RT-PCR; primer; ss.
XX
OS Mus sp.
XX
PN WO2003080836-A1.
XX
PD 02-OCT-2003.
XX
PF 26-MAR-2003; 2003WO-JP003713.
XX
PR 26-MAR-2002; 2002JP-00086843.
XX
PA (KAZU-) KAZUSA DNA RES INST.
PA (FUJI) FUJISAWA PHARM CO LTD.
XX
PI Miyoshi S, Zenkoh J, Satoh S, Nishimura S;
XX
DR WPI; 2003-865124/80.
XX
PT New polynucleotides encoding proteins useful for treating disorders
PT associated with cell growth, division and death and hepatitis.
XX
PS Example 7; SEQ ID NO 18; 142pp; Japanese.
XX
CC The invention relates to a splice variant of human HJ06972 (KIAA1079),
CC designated AF06972 (ADD93815), and nucleic acids encoding it (ADD93814).
CC Compared to the HJ06972 cDNA (ADD93812), AF06972 cDNA contains an
CC additional 94 bp exon (ADD93816) between bases 4623-4624 of HJ06972,
CC which results in a variant C-terminus (ADD93817) in AF06972. HJ06972 and
CC its splice variant AF06972 are related to apoptosis-associated tyrosine
CC kinase (AATYK), a protein which is involved in apoptosis and the
CC differentiation or proliferation of nerve cells, and are likely to have
CC similar activity. The invention also relates to vectors and host cells
CC comprising AF06972 DNA sequences, the recombinant production of AF06972
CC polypeptides, antibodies specific for AF06972, an immunoassay method
CC using the antibodies, a method for detecting apoptosis regulatory
CC activity, a method for evaluating a compound for its ability to induce
CC apoptosis or nerve cell differentiation or proliferation, and a
CC transgenic non-human animal model in which apoptosis, or nerve cell
CC division and growth has been modified. AF06972 polypeptides and
CC polynucleotides, and related compounds and methods of the invention may
CC be used in the treatment of disorders associated with apoptosis, nerve
CC cell growth and division, and hepatitis. Sequences ADD93829-ADD93830
CC represent mouse AF06972 (mAF06972) reverse transcription-PCR (RT-PCR)
CC primers used in an example of the invention.
XX
SQ Sequence 20 BP; 5 A; 3 C; 5 G; 7 T; 0 U; 0 Other;

Query Match 0.4%; Score 16.8; DB 1; Length 20;
Best Local Similarity 90.0%; Pred. No. 1.6e+02;
Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

```
Qy       2093 AGTATCTGTTGTAGCAGTTC 2112
              |||| ||||||||| |||||
Db          1 AGTACCTGTTGTAGAAGTTC 20
```

RESULT 116
ABZ87635/c

ID ABZ87635 standard; DNA; 20 BP.
XX
AC ABZ87635;
XX
DT 17-OCT-2003 (first entry)
XX
DE Human oligonucleotide sequence.
XX
KW Human; antisense; lung dysfunction; nasal airway dysfunction;
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW lung inflammation; respiratory disease; ds.
XX
OS Homo sapiens.
XX
PN WO200285308-A2.
XX
PD 31-OCT-2002.
XX
PF 23-APR-2002; 2002WO-US013135.
XX
PR 24-APR-2001; 2001US-0286137P.
XX
PA (EPIG-) EPIGENESIS PHARM INC.
XX
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
DR WPI; 2003-229219/22.
XX
PT Pharmaceutical composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisense to specific gene(s) or its
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT ubiquinone.
XX
PS Disclosure; SEQ ID NO 2877; 872pp; English.
XX
CC The invention relates to a novel pharmaceutical composition, which has a
CC first active agent comprising an oligonucleotide antisense to the
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC antiinflammatory steroid and ubiquinone. A composition of the invention
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
CC immunosuppressive, and cytostatic activity. The composition may have a
CC use in antisense gene therapy. The composition is useful for treating or
CC preventing a respiratory, lung or malignant disease or condition, also
CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC receptor, producing bronchodilation, increasing levels of ubiquinone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 20 BP; 7 A; 3 C; 5 G; 5 T; 0 U; 0 Other;

Query Match 0.4%; Score 16.8; DB 1; Length 20;
Best Local Similarity 90.0%; Pred. No. 1.6e+02;
Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

```
Qy       1857 CAGCATTTTCCAAGTAGTCT 1876
              |||||||||||||||| | |
Db         20 CAGCATTTTCCAAGTACTGT 1
```

RESULT 117
ABD23865/c

ID ABD23865 standard; DNA; 20 BP.
XX
AC ABD23865;
XX
DT 29-JUL-2004 (first entry)
XX
DE Human myosin X-derived oligonucleotide SEQ ID 2877.
XX
KW Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
KW surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;
KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
KW pulmonary transplantation rejection; ss; primer.
XX
OS Homo sapiens.
XX
PN WO200285309-A2.
XX
PD 31-OCT-2002.
XX
PF 23-APR-2002; 2002WO-US013143.
XX
PR 24-APR-2001; 2001US-0286036P.
XX
PA (EPIG-) EPIGENESIS PHARM INC.
XX
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
DR WPI; 2003-093058/08.
XX
PT Pharmaceutical composition for treating asthma, has antisense
PT oligonucleotide containing less percentage of adenosine, targeted to
PT nucleic acids associated with lung airway or lung dysfunction, and
PT bronchodilating agent.
XX
PS Claim 15; SEQ ID NO 2877; 763pp; English.
XX
CC This invention describes a novel composition (a) a first active agent,
CC comprising oligonucleotides, effective for alleviating
CC bronchoconstriction, respiratory tract inflammation, allergies and
CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
CC surfactant depletion or hyposecretion, when administered to a mammal. The
CC oligonucleotides are derived from a gene encoding or regulating
CC expression of a target polypeptide associated with lung airway or lung
CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
CC The invention also describes a kit, that comprises: (a) a delivery
CC device, in separate containers, (b) the oligonucleotides, (c)
CC instructions for adding a carrier and for use of the kit. The composition
CC of the invention has antiallergic, antiinflammatory, antiasthmatic,
CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
CC beta-adrenergic agonist. The composition is useful for preventing or
CC treating a respiratory, lung or malignant disease. The administered
CC composition comprises oligo and is administered to reduce the production
CC or availability, or to increase the degradation of the target mRNA or to
CC reduce the amount of target polypeptide present in the lungs. The
CC pulmonary obstruction, and/or bronchoconstriction and/or lung
CC inflammation, allergies and/or surfactant hypoproduction are associated
CC with a disease or condition such as pulmonary vasoconstriction,
CC inflammation, allergies, asthma, impeded respiration, respiratory
CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
CC transplantation rejection, pulmonary infections, bronchitis or cancer.
CC The reduced adenosine content of the anti-sense oligos corresponding to
CC thymidines present in the target RNA serves to prevent the breakdown of
CC the oligonucleotides into products that free adenosine into the system
CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
CC prevent any unwanted effects due to it
XX
SQ Sequence 20 BP; 7 A; 3 C; 5 G; 5 T; 0 U; 0 Other;

Query Match 0.4%; Score 16.8; DB 1; Length 20;
Best Local Similarity 90.0%; Pred. No. 1.6e+02;
Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1857 CAGCATTTTCCAAGTAGTCT 1876
||||||||||||||||| | |
Db 20 CAGCATTTTCCAAGTACTGT 1

RESULT 118
ADH66468
ID ADH66468 standard; DNA; 20 BP.
XX
AC ADH66468;
XX
DT 25-MAR-2004 (first entry)
XX
DE Human glucocorticoid receptor-specific antisense oligonucleotide #3302.
XX
KW antisense oligonucleotide; glucocorticoid receptor; infection;
KW inflammation; tumour formation; diabetes; obesity;
KW cardiovascular disorder; hyperlipidaemia; Cushing's syndrome; human; ss;
KW phosphorothioate backbone; 2'-methoxyethyl; 2'-MOE.
XX
OS Homo sapiens.
XX
PN WO2003099215-A2.
XX
PD 04-DEC-2003.
XX
PF 20-MAY-2003; 2003WO-US016084.
XX
PR 20-MAY-2002; 2002US-0381857P.
XX
PA (PHAA) PHARMACIA CORP.
XX
PI Crosby SD, Nalseth AE;
XX
DR WPI; 2004-035034/03.
XX
PT New antisense compound targeted to a nucleic acid molecule encoding
PT mammalian glucocorticoid receptor, useful for treating diabetes, obesity,
PT cardiovascular disorder, hyperlipidemia or Cushing's syndrome.
XX
PS Claim 4; SEQ ID NO 3302; 985pp; English.
XX
CC The invention comprises an antisense oligonucleotides that are targeted
CC to nucleic acids encoding a mammalian glucocorticoid receptor. The
CC antisense oligonucleotides of the invention are useful for preventing or
CC delaying infection, inflammation or tumour formation. The antisense
CC oligonucleotides are also useful for treating diabetes, obesity,
CC cardiovascular disorders, hyperlipidaemia or Cushing's syndrome. The
CC present DNA sequence represents an antisense oligonucleotide that targets
CC the human glucocorticoid receptor gene. NOTE: The present sequence
CC contains 2'-methoxyethyl (2'-MOE) wings and a phosphorothioate backbone.
XX
SQ Sequence 20 BP; 4 A; 3 C; 4 G; 9 T; 0 U; 0 Other;

Query Match 0.4%; Score 16.8; DB 1; Length 20;
Best Local Similarity 90.0%; Pred. No. 1.6e+02;
Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1323 TTCAAAGGTTGCTGTTCTCA 1342
|||||| |||||||||| |
Db 1 TTCAAATGTTGCTGTTCTGA 20

RESULT 119
ADH66115
ID ADH66115 standard; DNA; 20 BP.
XX
AC ADH66115;

XX
DT 25-MAR-2004 (first entry)
XX
DE Human glucocorticoid receptor-specific antisense oligonucleotide #2949.
XX
KW antisense oligonucleotide; glucocorticoid receptor; infection;
KW inflammation; tumour formation; diabetes; obesity;
KW cardiovascular disorder; hyperlipidaemia; Cushing's syndrome; human; ss;
KW phosphorothioate backbone; 2'-methoxyethyl; 2'-MOE.
XX
OS Homo sapiens.
XX
PN WO2003099215-A2.
XX
PD 04-DEC-2003.
XX
PF 20-MAY-2003; 2003WO-US016084.
XX
PR 20-MAY-2002; 2002US-0381857P.
XX
PA (PHAA) PHARMACIA CORP.
XX
PI Crosby SD, Nalseth AE;
XX
DR WPI; 2004-035034/03.
XX
PT New antisense compound targeted to a nucleic acid molecule encoding
PT mammalian glucocorticoid receptor, useful for treating diabetes, obesity,
PT cardiovascular disorder, hyperlipidemia or Cushing's syndrome.
XX
PS Claim 4; SEQ ID NO 2949; 985pp; English.
XX
CC The invention comprises an antisense oligonucleotides that are targeted
CC to nucleic acids encoding a mammalian glucocorticoid receptor. The
CC antisense oligonucleotides of the invention are useful for preventing or
CC delaying infection, inflammation or tumour formation. The antisense
CC oligonucleotides are also useful for treating diabetes, obesity,
CC cardiovascular disorders, hyperlipidaemia or Cushing's syndrome. The
CC present DNA sequence represents an antisense oligonucleotide that targets
CC the human glucocorticoid receptor gene. NOTE: The present sequence
CC contains 2'-methoxyethyl (2'-MOE) wings and a phosphorothioate backbone.
XX
SQ Sequence 20 BP; 5 A; 3 C; 4 G; 8 T; 0 U; 0 Other;

Query Match 0.4%; Score 16.8; DB 1; Length 20;
Best Local Similarity 90.0%; Pred. No. 1.6e+02;
Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

```
Qy       1324 TCAAAGGTTGCTGTTCTCAA 1343
              ||||| |||||||||||  ||
Db          1 TCAAATGTTGCTGTTCTGAA 20
```

RESULT 120
ADH67804/c
ID ADH67804 standard; DNA; 20 BP.
XX
AC ADH67804;
XX
DT 25-MAR-2004 (first entry)
XX
DE Human glucocorticoid receptor-specific antisense oligonucleotide #4638.
XX
KW antisense oligonucleotide; glucocorticoid receptor; infection;
KW inflammation; tumour formation; diabetes; obesity;
KW cardiovascular disorder; hyperlipidaemia; Cushing's syndrome; human; ss;
KW phosphorothioate backbone; 2'-methoxyethyl; 2'-MOE.
XX
OS Homo sapiens.
XX
PN WO2003099215-A2.
XX
PD 04-DEC-2003.
XX
PF 20-MAY-2003; 2003WO-US016084.
XX
PR 20-MAY-2002; 2002US-0381857P.
XX
PA (PHAA) PHARMACIA CORP.
XX
PI Crosby SD, Nalseth AE;
XX
DR WPI; 2004-035034/03.
XX
PT New antisense compound targeted to a nucleic acid molecule encoding
PT mammalian glucocorticoid receptor, useful for treating diabetes, obesity,
PT cardiovascular disorder, hyperlipidemia or Cushing's syndrome.
XX
PS Claim 4; SEQ ID NO 4638; 985pp; English.
XX
CC The invention comprises an antisense oligonucleotides that are targeted
CC to nucleic acids encoding a mammalian glucocorticoid receptor. The
CC antisense oligonucleotides of the invention are useful for preventing or
CC delaying infection, inflammation or tumour formation. The antisense
CC oligonucleotides are also useful for treating diabetes, obesity,
CC cardiovascular disorders, hyperlipidaemia or Cushing's syndrome. The
CC present DNA sequence represents an antisense oligonucleotide that targets
CC the human glucocorticoid receptor gene. NOTE: The present sequence
CC contains 2'-methoxyethyl (2'-MOE) wings and a phosphorothioate backbone.
XX
SQ Sequence 20 BP; 12 A; 0 C; 1 G; 7 T; 0 U; 0 Other;

Query Match 0.4%; Score 16.8; DB 1; Length 20;
Best Local Similarity 90.0%; Pred. No. 1.6e+02;
Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

```
Qy       3297 CTGATATATTTTTATTTTTA 3316
              || |||||||||||| ||||
Db         20 CTAATATATTTTTATATTTA 1
```

RESULT 121
AAZ25870
ID AAZ25870 standard; DNA; 21 BP.
XX
AC AAZ25870;
XX
DT 30-NOV-1999 (first entry)
XX
DE Human polymorphic region 59.
XX
KW Polymorphism; human; inhibitor; cancer; treatment; cell growth; LOH;
KW cell viability; loss of heterozygosity; precancerous condition; ASI;
KW allele specific inhibitor; somatic cell; diagnosis; prevention;
KW atherosclerotic plaque; premalignant metaplastic lesion; endometriosis;
KW dysplastic lesion; benign tumour; polycystic kidney disease; transplant;
KW graft versus host disease; malignant cell removal; bone marrow; ss.
XX
OS Homo sapiens.
XX
PN WO9841648-A2.
XX
PD 24-SEP-1998.
XX
PF 19-MAR-1998; 98WO-US005419.
XX
PR 20-MAR-1997; 97US-0041057P.
XX
PA (VARI-) VARIAGENICS INC.
XX
PI Housman D, Ledley FD, Stanton VP;
XX
DR WPI; 1998-521232/44.
XX
PT Identifying target genes for allele-specific drugs - used for diagnosis,
PT prevention and treatment of, e.g. cancers, atherosclerotic plaque,

```
PT   dysplastic lesions, endometriosis or graft versus host disease.
XX
PS   Example 14; Fig 1; 605pp; English.
XX
CC   This invention describes a novel method for identifying an inhibitor
CC   potentially useful for treatment of cancer, where the inhibitor is active
CC   on a gene vital for cell growth or viability, and where the gene is
CC   subject to loss of heterozygosity (LOH) in a cancer. The inhibitor is
CC   used for preventing the development of cancer in a patient having a
CC   precancerous condition, by administering to the patient a first allele
CC   specific inhibitor (ASI) targeted to an allele of a first essential gene
CC   present in cells of the precancerous condition, where the normal somatic
CC   cells of the patient are heterozygous for the first gene, the inhibitor
CC   is active on at least one but less than all allelic forms of the gene
CC   present in a population and targets only one allelic form present in the
CC   normal somatic cells, and the first gene. The products and methods can be
CC   used in the diagnosis, prevention and treatment of LOH disorders, e.g.
CC   cancers, atherosclerotic plaques, premalignant metaplastic or dysplastic
CC   lesions, benign tumours, endometriosis, polycystic kidney disease, and
CC   graft versus host disease. The method can also be used to remove
CC   malignant cells from bone marrow transplants. AAZ25812-Z26825 represent
CC   human polymorphic sites described in the method of the invention
XX
SQ   Sequence 21 BP; 5 A; 8 C; 3 G; 5 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 16.8;  DB 1;  Length 21;
  Best Local Similarity   90.0%;  Pred. No. 1.7e+02;
  Matches   18;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       2314 CCATTGCTGCCAACATCATC 2333
              ||||||||||||||||| | |
Db          1 CCATTGCTGCCAACATGACC 20


RESULT 122
AAV80034
ID   AAV80034 standard; DNA; 20 BP.
XX
AC   AAV80034;
XX
DT   16-MAR-1999  (first entry)
XX
DE   Primer intU2 for SSCP analysis of PMM2 exon 5A.
XX
KW   Phosphomannomutase-2; PMM2; CDG1; mutation; human; transgenic; assay;
KW   carbohydrate-deficient glycoprotein syndrome type 1; drug screening;
KW   Jaeken disease; single-strand confirmation polymorphism; SSCP;
KW   prenatal diagnosis; PCR primer; ss.
XX
OS   Synthetic.
OS   Homo sapiens.
XX
PN   WO9849324-A2.
XX
PD   05-NOV-1998.
XX
PF   30-APR-1998;   98WO-EP002593.
XX
PR   30-APR-1997;   97GB-00008851.
PR   27-JAN-1998;   98GB-00001719.
XX
PA   (GENZ ) GENZYME UK LTD.
XX
PI   Matthijs G;
XX
DR   WPI; 1999-024063/02.
XX
PT   New DNA encoding human phosphomannomutase or its fragments - used to
PT   detect mutations associated with carbohydrate-deficient glycoprotein
PT   syndrome-1, particularly for prenatal diagnosis.
XX
PS   Claim 5; Page 64; 104pp; English.
XX
CC   The invention relates to a human phosphomannomutase-2 (PMM2) protein and
CC   the nucleotide sequence encoding the protein. The DNA or its fragments
CC   are used to detect mutation in the PMM2 genes that are associated with
CC   the carbohydrate-deficient glycoprotein syndrome type 1 (CDG1). The
CC   sequences can also be used to detect expression of PMM2-related cDNA; to
CC   express PMM2 or its mutants; and to create transgenic animals for use in
CC   drug screening and for studying expression pathways. The expressed
CC   proteins are used to screen for agents that modulate activity of PMM2,
CC   for therapy and to raise specific antibodies (for detecting PMM2 or its
CC   mutants, in competitive or capture assays). Biochemical assays for
CC   phophomannomutase activity are used to identify possible carriers of CDG1
CC   (Jaeken disease). Measuring enzymatic activity in foetal cells (or in
CC   parental leucocytes if such cells are unavailable) and detecting
CC   mutations in the PMM2 gene makes possible a better prenatal diagnosis of
CC   CDG1. Sequences AAV80026-43 represent primers used in PCR and single-
CC   strand confirmation polymorphism (SSCP) analysis of the 8 exons of PMM2
CC   gene. These primers are used to determine the SSCP mutations in the PMM2
CC   gene
XX
SQ   Sequence 20 BP; 8 A; 4 C; 5 G; 3 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 16.4;  DB 1;  Length 20;
  Best Local Similarity   94.4%;  Pred. No. 1.8e+02;
  Matches   17;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1640 CACAGAGCTGAGAAACTT 1657
              |||||||||||||||| |
Db          2 CACAGAGCTGAGAAACAT 19


RESULT 123
ABT13876/c
ID   ABT13876 standard; DNA; 20 BP.
XX
AC   ABT13876;
XX
DT   13-FEB-2003  (first entry)
XX
DE   Human helicase-moi inhibiting oligonucleotide #1.
XX
KW   Human; antisense gene therapy; phosphorothioate backbone;
KW   antisense oligonucleotide; helicase-moi gene; inflammation; ss;
KW   helicase-moi-associated condition; infection; tumour formation;
KW   2-MOE nucleotide; 2'-methoxyethyl nucleotide.
XX
OS   Homo sapiens.
XX
PN   US6444466-B1.
XX
PD   03-SEP-2002.
XX
PF   10-MAY-2001; 2001US-00853768.
XX
PR   10-MAY-2001; 2001US-00853768.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Ward DT,  Watt AT;
XX
DR   WPI; 2002-749291/81.
XX
PT   Novel antisense compound for modulating expression of human helicase-moi
PT   and for treating inflammation, specifically hybridizes to a specific
PT   region in nucleic acid molecule encoding the human helicase-moi.
XX
PS   Claim 3; Col 43-44; 52pp; English.
XX
CC   The invention comprises antisense oligonucleotides which are targeted to
CC   the coding region of the human helicase-moi gene. The antisense
CC   oligonucleotides of the invention are useful for inhibiting the
CC   expression of human helicase-moi in cells or tissues, and for treating a
CC   helicase-moi-associated condition. The antisense oligonucleotides of the
CC   invention may also be used to delay infection, inflammation and tumour
```

```
CC   formation. The present DNA sequence represents a human helicase-moi gene
CC   antisense oligonucleotide of the invention. NOTE: The present DNA
CC   sequence has a phosphorothioate backbone, bases 1-5 and 16-20 are 2'-
CC   methoxyethyl (2'-MOE) nucleotides
XX
SQ   Sequence 20 BP; 4 A; 4 C; 3 G; 9 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 16.4;  DB 1;  Length 20;
  Best Local Similarity   94.4%;  Pred. No. 1.8e+02;
  Matches   17;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        613 AAACTTTGAAAGAACTTA 630
              ||||| ||||||||||||
Db         19 AAACTCTGAAAGAACTTA 2


RESULT 124
ADN60081/c
ID   ADN60081 standard; DNA; 20 BP.
XX
AC   ADN60081;
XX
DT   01-JUL-2004  (first entry)
XX
DE   Human helicase-moi, antisense oligonucleotide #1.
XX
KW   Cytostatic; Antisense therapy; ss; human; helicase-moi; inflammation;
KW   hyperproliferative disorder; RNA-mediated interference; probe.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   modified_base    1. .20
FT                    /*tag=  b
FT                    /mod_base= Other
FT                    /note= "Phosphorothioate linkages. All cytidines are 5'-
FT                    methylcytidines"
FT   modified_base    1. .5
FT                    /*tag=  a
FT                    /mod_base= Other
FT                    /note= "2'-methoxyethyl (2'-MOE) nucleotides"
FT   modified_base    16. .20
FT                    /*tag=  c
FT                    /mod_base= Other
FT                    /note= "2'-methoxyethyl (2'-MOE) nucleotides"
XX
PN   US2003176380-A1.
XX
PD   18-SEP-2003.
XX
PF   31-MAY-2002; 2002US-00160632.
XX
PR   10-MAY-2001; 2001US-00853768.
XX
PA   (WARD/) WARD D T.
PA   (WATT/) WATT A T.
XX
PI   Ward DT,  Watt AT;
XX
DR   WPI; 2003-898586/82.
XX
PT   New antisense oligonucleotides for modulating helicase-moi expression,
PT   useful for diagnosing, preventing or treating diseases or conditions
PT   associated with helicase-moi, e.g. inflammation or hyperproliferative
PT   disorders.
XX
PS   Claim 3; SEQ ID NO 14; 56pp; English.
XX
CC   The invention relates to antisense oligonucleotides, compositions and
CC   methods for modulating the expression of helicase-moi. The
CC   oligonucleotides are used in treating an animal having a disease or
CC   condition associated with helicase-moi, such as inflammation, a
CC   hyperproliferative disorder or a condition that arises from RNA-mediated
CC   interference. The present sequence represents a human helicase-moi
CC   antisense oligonucleotide.
XX
SQ   Sequence 20 BP; 4 A; 4 C; 3 G; 9 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 16.4;  DB 1;  Length 20;
  Best Local Similarity   94.4%;  Pred. No. 1.8e+02;
  Matches   17;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        613 AAACTTTGAAAGAACTTA 630
              ||||| ||||||||||||
Db         19 AAACTCTGAAAGAACTTA 2


RESULT 125
ADH65626
ID   ADH65626 standard; DNA; 20 BP.
XX
AC   ADH65626;
XX
DT   25-MAR-2004  (first entry)
XX
DE   Human glucocorticoid receptor-specific antisense oligonucleotide #2460.
XX
KW   antisense oligonucleotide; glucocorticoid receptor; infection;
KW   inflammation; tumour formation; diabetes; obesity;
KW   cardiovascular disorder; hyperlipidaemia; Cushing's syndrome; human; ss;
KW   phosphorothioate backbone; 2'-methoxyethyl; 2'-MOE.
XX
OS   Homo sapiens.
XX
PN   WO2003099215-A2.
XX
PD   04-DEC-2003.
XX
PF   20-MAY-2003; 2003WO-US016084.
XX
PR   20-MAY-2002; 2002US-0381857P.
XX
PA   (PHAA ) PHARMACIA CORP.
XX
PI   Crosby SD,  Nalseth AE;
XX
DR   WPI; 2004-035034/03.
XX
PT   New antisense compound targeted to a nucleic acid molecule encoding
PT   mammalian glucocorticoid receptor, useful for treating diabetes, obesity,
PT   cardiovascular disorder, hyperlipidemia or Cushing's syndrome.
XX
PS   Claim 4; SEQ ID NO 2460; 985pp; English.
XX
CC   The invention comprises an antisense oligonucleotides that are targeted
CC   to nucleic acids encoding a mammalian glucocorticoid receptor. The
CC   antisense oligonucleotides of the invention are useful for preventing or
CC   delaying infection, inflammation or tumour formation. The antisense
CC   oligonucleotides are also useful for treating diabetes, obesity,
CC   cardiovascular disorders, hyperlipidaemia or Cushing's syndrome. The
CC   present DNA sequence represents an antisense oligonucleotide that targets
CC   the human glucocorticoid receptor gene. NOTE: The present sequence
CC   contains 2'-methoxyethyl (2'-MOE) wings and a phosphorothioate backbone.
XX
SQ   Sequence 20 BP; 3 A; 5 C; 3 G; 9 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 16.4;  DB 1;  Length 20;
  Best Local Similarity   94.4%;  Pred. No. 1.8e+02;
  Matches   17;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1323 TTCAAAGGTTGCTGTTCT 1340
              |||||| ||||||||||
Db          3 TTCAAATGTTGCTGTTCT 20


RESULT 126
```

ADH67258
ID ADH67258 standard; DNA; 20 BP.
XX
AC ADH67258;
XX
DT 25-MAR-2004 (first entry)
XX
DE Human glucocorticoid receptor-specific antisense oligonucleotide #4092.
XX
KW antisense oligonucleotide; glucocorticoid receptor; infection;
KW inflammation; tumour formation; diabetes; obesity;
KW cardiovascular disorder; hyperlipidaemia; Cushing's syndrome; human; ss;
KW phosphorothioate backbone; 2'-methoxyethyl; 2'-MOE.
XX
OS Homo sapiens.
XX
PN WO2003099215-A2.
XX
PD 04-DEC-2003.
XX
PF 20-MAY-2003; 2003WO-US016084.
XX
PR 20-MAY-2002; 2002US-0381857P.
XX
PA (PHAA) PHARMACIA CORP.
XX
PI Crosby SD, Nalseth AE;
XX
DR WPI; 2004-035034/03.
XX
PT New antisense compound targeted to a nucleic acid molecule encoding
PT mammalian glucocorticoid receptor, useful for treating diabetes, obesity,
PT cardiovascular disorder, hyperlipidemia or Cushing's syndrome.
XX
PS Claim 4; SEQ ID NO 4092; 985pp; English.
XX
CC The invention comprises an antisense oligonucleotides that are targeted
CC to nucleic acids encoding a mammalian glucocorticoid receptor. The
CC antisense oligonucleotides of the invention are useful for preventing or
CC delaying infection, inflammation or tumour formation. The antisense
CC oligonucleotides are also useful for treating diabetes, obesity,
CC cardiovascular disorders, hyperlipidaemia or Cushing's syndrome. The
CC present DNA sequence represents an antisense oligonucleotide that targets
CC the human glucocorticoid receptor gene. NOTE: The present sequence
CC contains 2'-methoxyethyl (2'-MOE) wings and a phosphorothioate backbone.
XX
SQ Sequence 20 BP; 3 A; 4 C; 4 G; 9 T; 0 U; 0 Other;

Query Match 0.4%; Score 16.4; DB 1; Length 20;
Best Local Similarity 94.4%; Pred. No. 1.8e+02;
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

```
Qy       1323 TTCAAAGGTTGCTGTTCT 1340
              |||||| ||||||||||
Db          2 TTCAAATGTTGCTGTTCT 19
```

RESULT 127
ADO55876
ID ADO55876 standard; DNA; 20 BP.
XX
AC ADO55876;
XX
DT 12-AUG-2004 (first entry)
XX
DE Human NIMA-related kinase 6 DNA target sequence #30.
XX
KW Antisense therapy; human; NIMA-related kinase 6;
KW never in mitosis gene a-related kinase 6; hyperproliferative disorder;
KW cancer; cytostatic; ds.
XX
OS Homo sapiens.
XX
PN US2004097441-A1.
XX
PD 20-MAY-2004.
XX
PF 16-NOV-2002; 2002US-00295471.
XX
PR 16-NOV-2002; 2002US-00295471.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Dobie KW;
XX
DR WPI; 2004-389184/36.
XX
PT New antisense oligonucleotides for modulating never in mitosis, gene a
PT (NIMA)-related kinase 6 expression, useful for diagnosing, preventing or
PT treating diseases associated with the kinase, e.g. hyperproliferative
PT disorders.
XX
PS Example 15; SEQ ID NO 122; 51pp; English.
XX
CC The present invention relates to antisense compounds targeted to a
CC nucleic acid encoding human never in mitosis gene a-related kinase 6
CC (NIMA-related kinase 6). The antisense compound comprises an antisense
CC oligonucleotide that specifically hybridises with the nucleic acid and
CC inhibits the expression of NIMA-related kinase 6. The antisense
CC oligonucleotide is a chimeric oligonucleotide. The antisense
CC oligonucleotide comprises at least one modified internucleoside linkage,
CC preferably a phosphorothioate linkage. It also comprises at least one
CC modified sugar moiety, preferably a 2'-O-methoxyethyl (2'-MOE) sugar
CC moiety. The antisense oligonucleotide further comprises at least one
CC modified nucleobase, preferably a 5-methylcytosine. The antisense
CC oligonucleotides are useful for the treatment of diseases such as
CC hyperproliferative disorders, e.g. cancer. The present sequence
CC represents a human NIMA-related kinase 6 DNA target sequence for an
CC antisense oligonucleotide.
XX
SQ Sequence 20 BP; 5 A; 7 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 0.4%; Score 16.4; DB 1; Length 20;
Best Local Similarity 94.4%; Pred. No. 1.8e+02;
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

```
Qy       1439 ACATCTGGATTTCCAGCA 1456
              |||||||||| |||||||
Db          1 ACATCTGGATGTCCAGCA 18
```

RESULT 128
ADO55815/c
ID ADO55815 standard; DNA; 20 BP.
XX
AC ADO55815;
XX
DT 12-AUG-2004 (first entry)
XX
DE Human NIMA-related kinase 6 DNA, antisense oligonucleotide #38.
XX
KW Antisense therapy; human; NIMA-related kinase 6;
KW never in mitosis gene a-related kinase 6; hyperproliferative disorder;
KW cancer; cytostatic; phosphorothioate; ss.
XX
OS Homo sapiens.
XX
FH Key Location/Qualifiers
FT modified_base 1. .20
FT /*tag= a
FT /mod_base= OTHER
FT /note= "This oligonucleotide has a phosphorothioate
FT backbone and 2'-methyoxyethyl (2'-MOE) wings at the 5'
FT and 3' ends, which are 5 nucleotides in length at each
FT end. All cytidine residues are 5-methylcytidines"
XX

PN US2004097441-A1.
XX
PD 20-MAY-2004.
XX
PF 16-NOV-2002; 2002US-00295471.
XX
PR 16-NOV-2002; 2002US-00295471.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Dobie KW;
XX
DR WPI; 2004-389184/36.
XX
PT New antisense oligonucleotides for modulating never in mitosis, gene a
PT (NIMA)-related kinase 6 expression, useful for diagnosing, preventing or
PT treating diseases associated with the kinase, e.g. hyperproliferative
PT disorders.
XX
PS Example 15; SEQ ID NO 52; 51pp; English.
XX
CC The present invention relates to antisense compounds targeted to a
CC nucleic acid encoding human never in mitosis gene a-related kinase 6
CC (NIMA-related kinase 6). The antisense compound comprises an antisense
CC oligonucleotide that specifically hybridises with the nucleic acid and
CC inhibits the expression of NIMA-related kinase 6. The antisense
CC oligonucleotide is a chimeric oligonucleotide. The antisense
CC oligonucleotide comprises at least one modified internucleoside linkage,
CC preferably a phosphorothioate linkage. It also comprises at least one
CC modified sugar moiety, preferably a 2'-O-methoxyethyl (2'-MOE) sugar
CC moiety. The antisense oligonucleotide further comprises at least one
CC modified nucleobase, preferably a 5-methylcytosine. The antisense
CC oligonucleotides are useful for the treatment of diseases such as
CC hyperproliferative disorders, e.g. cancer. The present sequence
CC represents an antisense oligonucleotide used in the examples of the
CC present invention.
XX
SQ Sequence 20 BP; 4 A; 4 C; 7 G; 5 T; 0 U; 0 Other;

Query Match 0.4%; Score 16.4; DB 1; Length 20;
Best Local Similarity 94.4%; Pred. No. 1.8e+02;
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1439 ACATCTGGATTTCCAGCA 1456
||||||||||| |||||||
Db 20 ACATCTGGATGTCCAGCA 3

RESULT 129
ADN14299
ID ADN14299 standard; DNA; 21 BP.
XX
AC ADN14299;
XX
DT 15-JUL-2004 (first entry)
XX
DE PCR primer used to amplify a murine gene SeqID 18.
XX
KW murine; PCR; ss; antidiabetic; mouse; beta-cell hypofunction; diabetes;
KW type II diabetes; non-insulin dependent diabetes mellitus; NIDDM; primer.
XX
OS Mus musculus.
XX
PN WO2004035830-A1.
XX
PD 29-APR-2004.
XX
PF 17-OCT-2003; 2003WO-JP013311.
XX
PR 18-OCT-2002; 2002JP-00304524.
XX
PA (SANY) SANKYO CO LTD.
XX
PI Koga T, Taguchi T, Oshima K, Fujiwara T;
XX
DR WPI; 2004-365167/34.
XX
PT Evaluating substances for treating functional failure in B-cells caused
PT by diabetes.
XX
PS Example 4; SEQ ID NO 18; 142pp; Japanese.
XX
CC This invention relates to a novel method for evaluating substances for
CC their effectiveness in treating beta-cell hypofunction. Specifically, it
CC refers to the beta cells of the pancreas islets that normally function to
CC synthesise and secrete insulin in response to glucose in the blood. The
CC present invention describes measuring the expression levels of at least
CC one of eight specific genes in the presence of a test substance, to
CC indicate its effectiveness in treating beta-cell hypofunction.
CC Accordingly, this method can be used in the treatment of diabetes, in
CC particular type II diabetes (or non-insulin dependent diabetes mellitus,
CC NIDDM). This oligonucleotide is a murine PCR primer given in an
CC exemplification of the invention.
XX
SQ Sequence 21 BP; 7 A; 8 C; 2 G; 4 T; 0 U; 0 Other;

Query Match 0.4%; Score 16.4; DB 1; Length 21;
Best Local Similarity 94.4%; Pred. No. 1.9e+02;
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 753 GTTCTACATCAAATGCCC 770
| ||||||||||||||||
Db 3 GCTCTACATCAAATGCCC 20

RESULT 130
AAT10575
ID AAT10575 standard; DNA; 21 BP.
XX
AC AAT10575;
XX
DT 05-SEP-1996 (first entry)
XX
DE Cbeta-specific primer H3Cbeta3.
XX
KW Polymerase chain reaction; PCR; primer; amplify; human; T cell receptor;
KW beta chain; TCR; myelin basic protein; BP; autoantigen; encephalitogen;
KW experimental autoimmune encephalomyelitis; EAE; multiple sclerosis; MS;
KW autoimmune disease; neurological disease; cerebrospinal fluid; therapy;
KW central nervous system; complementarity determining region; CDR;
KW T lymphocyte; optical nerve damage; anterior chamber inflammation; ss.
XX
OS Synthetic.
XX
PN WO9601329-A1.
XX
PD 18-JAN-1996.
XX
PF 26-JUN-1995; 95WO-US008086.
XX
PR 01-JUL-1994; 94US-00270634.
XX
PA (CONN-) CONNECTIVE THERAPEUTICS INC.
XX
PI Vandenbark AA, Offner H, Buenafe A;
XX
DR WPI; 1996-087679/09.
XX
PT Methods for diagnosis and immune-related therapy of autoimmune diseases -
PT partic. multiple sclerosis, by detecting marker T cell receptor V gene
PT bias and treating patients with selected V beta peptide(s).
XX
PS Example 1; Page 26; 62pp; English.
XX
CC AAT10575 and AAT10576 represent amplification primers specific for the
CC human T cell receptor beta (TCRbeta) chain of the myelin basic protein

```
CC   (BP). BP is the major autoantigen involved in experimental autoimmune
CC   encephalomyelitis (EAE), and is the leading candidate as an
CC   encephalitogen involved in multiple sclerosis (MS). By detecting the
CC   presence of a marker TCR variable (V) gene bias in a body fluid which
CC   encapsulates all or a portion of the target organ, an autoimmune disease
CC   (such as a neurological disease) in a human can be identified. This
CC   method can also be carried out to detect the presence of a biased motif
CC   common to T cell receptors specific for the pathogenic antigen in a non-
CC   target tissue or organ. By analysing the Vbeta gene repertoire of
CC   cerebrospinal fluid (CF), and determining the presence of a Vbeta gene
CC   bias, an immune-related disease that targets the central nervous system
CC   can be diagnosed. Therapeutic Vbeta peptide sequences can be selected to
CC   use as treatment of a disease or condition. The selection is carried out
CC   by identifying a Vbeta gene bias in a body fluid that is not the target
CC   tissue or organ of the disease, and selecting an immunogenic peptide
CC   corresponding to the Vbeta gene bias. MS can be treated by identifying
CC   the complementarity determining region 2 (CDR2) of a V gene peptide on
CC   the surface of a T lymphocyte in the CF of a patient and administering a
CC   peptide corresponding to this region. These methods can also be used for
CC   the diagnosis and immune-related therapy of optical nerve damage and
CC   anterior chamber inflammation as well as other human neurological
CC   diseases
XX
SQ   Sequence 21 BP; 4 A; 5 C; 7 G; 5 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 16.2;  DB 1;  Length 21;
  Best Local Similarity   85.7%;  Pred. No. 2e+02;
  Matches   18;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       2496 CTGCTCAGGCAGCAGGTGGAG 2516
             ||||||||||||  |  |||||
Db          1 CTGCTCAGGCAGTATCTGGAG 21


RESULT 131
AAV08680/c
ID   AAV08680 standard; DNA; 21 BP.
XX
AC   AAV08680;
XX
DT   15-FEB-1999  (first entry)
XX
DE   Primer ATP/17FB for human ACE gene.
XX
KW   PCR primer; human; ACE; angiotensin converting enzyme; angiotensinogen;
KW   cardiovascular status; AGT; AT1; type 1 angiotensin II receptor; stroke;
KW   polymorphic pattern; blood pressure; electrocardiographic profile;
KW   cardiac condition diagnosis; myocardial infarction; atherosclerosis;
KW   hypertension; cardiovascular disease; ss.
XX
OS   Synthetic.
OS   Homo sapiens.
XX
PN   WO9845477-A2.
XX
PD   15-OCT-1998.
XX
PF   01-APR-1998;   98WO-IB000475.
XX
PR   04-APR-1997;   97US-0042930P.
XX
PA   (EURO-) EURONA MEDICAL AB.
XX
PI   Norberg LT,  Andersson MK,  Lindstroem PHR;
XX
DR   WPI; 1998-568361/48.
XX
PT   Assessing cardiovascular status in humans by polymorphic analysis - of
PT   genes for angiotensin converting enzyme, angiotensinogen and angiotensin
PT   II receptor, used to diagnose predisposition to disease and to predict
PT   effect of therapy.
XX
PS   Example 1; Page 32; 71pp; English.
XX
CC   This sequence represents a PCR primer for the human ACE (angiotensin
CC   converting enzyme) gene, and can be used in the method of the invention.
CC   The method is for assessing cardiovascular status in humans by
CC   determining the sequence of at least one polymorphic site in the ACE
CC   (angiotensin converting enzyme), AGT (angiotensinogen) and/or AT1 (type 1
CC   angiotensin II receptor) genes, and comparing the polymorphic pattern
CC   with that in patients with predetermined markers of status. The method is
CC   used to assess blood pressure or electrocardiographic profile, to
CC   diagnose a cardiac condition such as (silent) myocardial infarction (MI),
CC   hypertension, atherosclerosis or stroke. They can also be used to predict
CC   response to treatments with ACE inhibitors, angiotensin II receptor
CC   antagonists, diuretics, alpha- or beta-adrenergic receptor antagonists,
CC   etc. It is also used to identify susceptibility to cardiovascular
CC   disease. Libraries of nucleic acids containing polymorphic positions in
CC   the 3 genes, and libraries of targets corresponding to the peptides from
CC   the genes are used to screen for cardiovascular agents. The nucleic acids
CC   contained in the library can be is used as source of probes
XX
SQ   Sequence 21 BP; 4 A; 8 C; 2 G; 7 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 16.2;  DB 1;  Length 21;
  Best Local Similarity   85.7%;  Pred. No. 2e+02;
  Matches   18;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy         27 AGTGAGGATGATGCCAGGATG 47
              |||||||  |||||||||  | |
Db         21 AGTGAGGTTGATGCCAGAAAG 1


RESULT 132
AAA95550/c
ID   AAA95550 standard; DNA; 21 BP.
XX
AC   AAA95550;
XX
DT   31-JAN-2001  (first entry)
XX
DE   TCR Valpha 2 subfamily probe VA02-2.
XX
KW   Detection; diagnostic; Kawasaki disease; T-cell; PCR primer; probe;
KW   gene expression; ss.
XX
OS   Homo sapiens.
XX
PN   JP2000157297-A.
XX
PD   13-JUN-2000.
XX
PF   01-DEC-1998;   98JP-00341661.
XX
PR   01-DEC-1998;   98JP-00341661.
XX
PA   (SHIO ) SHIONOGI & CO LTD.
XX
DR   WPI; 2000-477722/42.
XX
PT   Detection of Kawasaki disease factor, useful for the diagnosis of
PT   Kawasaki disease, comprises detecting an increase in Vbeta6.5 positive T-
PT   cells.
XX
PS   Example 1; Page 6; 36pp; Japanese.
XX
CC   The invention relates to a method of detecting Kawasaki disease by
CC   detecting an increase in Vbeta6.5 or Vbeta6.5/Vbeta2.1 positive T-cells.
CC   The sequences AAA95531-A95626 represent primers and probes used to PCR
CC   amplify and detect the level of expression of Valpha and Vbeta genes in T
CC   -cells in Kawasaki disease
XX
SQ   Sequence 21 BP; 8 A; 6 C; 4 G; 3 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 16.2;  DB 1;  Length 21;
  Best Local Similarity   85.7%;  Pred. No. 2e+02;
```

```
  Matches   18;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        409 TGCTGGATTTATCCAGGTGTG 429
              ||||||||||||| |  ||||
Db         21 TGCTGGATTTATCGACCTGTG 1


RESULT 133
AAA38308/c
ID   AAA38308 standard; DNA; 21 BP.
XX
AC   AAA38308;
XX
DT   21-AUG-2000  (first entry)
XX
DE   Human AT1 regulatory region PCR primer, SEQ ID NO:108.
XX
KW   Angiotensin II receptor type 1 gene; AT1; regulatory region;
KW   polymorphism; polymorphic marker; cardiovascular disease;
KW   myocardial infarction; unstable angina; hypertension; atherosclerosis;
KW   stroke; prognosis; drug screening; treatment outcome; human; PCR primer;
KW   ss.
XX
OS   Homo sapiens.
XX
PN   WO200022166-A2.
XX
PD   20-APR-2000.
XX
PF   13-OCT-1999;   99WO-IB001678.
XX
PR   14-OCT-1998;   98US-0104286P.
PR   14-OCT-1998;   98US-0104302P.
XX
PA   (EURO-) EURONA MEDICAL AB.
XX
PI   Norberg LT,  Andersson MK,  Lindstrom PHR,  Jonsson L;
XX
DR   WPI; 2000-318010/27.
XX
PT   Assessing cardiovascular status in humans involves comparing test
PT   polymorphic pattern comprising polymorphic positions within genes
PT   encoding specific proteins, with reference polymorphic pattern.
XX
PS   Example 1; Page 53; 126pp; English.
XX
CC   The invention relates to a novel method of assessing the cardiovascular
CC   status in an individual and to newly identified polymorphisms in the
CC   genes encoding angiotensin-converting enzyme (ACE), angiotensin II
CC   receptor type 1 (AT1) and type 2 (AT2), angiotensinogen (AGT), renin,
CC   aldosterone synthase, endothelin receptor type A and beta-adrenergic
CC   receptors 1 and 2. The method comprises determining the sequence at one
CC   or more polymorphic positions within these genes, and comparing the
CC   pattern of polymorphisms from the individual with a reference polymorphic
CC   pattern obtained from a population of individuals exhibiting a
CC   predetermined cardiovascular disease status. The polymorphic markers are
CC   useful for determining the predisposition of an individual to
CC   cardiovascular disorders such as myocardial infarction, unstable angina,
CC   hypertension, atherosclerosis and stroke. They are also useful for
CC   predicting the likely cardiovascular status of a patient given a
CC   treatment regimen comprising administration of cardiovascular drugs
CC   (e.g., ACE inhibitors, beta-adrenergic receptor antagonists (beta-
CC   blockers) or calcium channel blockers). One or more polymorphic markers
CC   provides a basis for predicting the outcome of a treatment regimen.
CC   Fragments of the genes comprising a polymorphic site may be used as
CC   primers and probes for detecting genetic polymorphisms or in molecular
CC   library arrays for high throughput screening. The genes, and the proteins
CC   they encode are useful in the screening of potential cardiovascular
CC   drugs. Determination of an individual's polymorphic pattern reduces or
CC   eliminates trial and error in selecting a treatment for a particular
CC   individual cardiovascular patient. It also provides the ability to
CC   eliminate patients from clinical trials who are predicted to be non-
CC   responsive, or at a risk for an adverse response, to a particular
CC   treatment regimen. Adverse results in an early trial can be evaluated to
CC   identify polymorphic patterns so that the adverse results can be
CC   correlated with a sub-population of the test population, permitting
CC   exclusion of such sub-populations from the treatment group. Beneficial
CC   drugs can be approved for use in the appropriate population, thereby
CC   decreasing the number of patients required for a clinical trial, which in
CC   turn decreases the duration and cost of such trials. Sequences AAA38296-
CC   A38315 represent PCR primers used in an exemplification of the invention
CC   to amplify short fragments of the human angiotensin II receptor type 1
CC   (AT1) gene regulatory region (AAA38331) for sequence determination
XX
SQ   Sequence 21 BP; 4 A; 8 C; 2 G; 7 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 16.2;  DB 1;  Length 21;
  Best Local Similarity   85.7%;  Pred. No. 2e+02;
  Matches   18;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy         27 AGTGAGGATGATGCCAGGATG 47
              ||||||| ||||||||| | |
Db         21 AGTGAGGTTGATGCCAGAAAG 1


RESULT 134
AAC61308/c
ID   AAC61308 standard; DNA; 21 BP.
XX
AC   AAC61308;
XX
DT   30-JAN-2001  (first entry)
XX
DE   Human ACE, AGT and AT1 genes polymorphisms PCR primer SEQ ID NO: 108.
XX
KW   Human; genetic polymorphism; disease diagnosis; treatment; cancer;
KW   cardiovascular system; nervous system; glaucoma; PCR primer; ss.
XX
OS   Homo sapiens.
XX
PN   WO200056922-A2.
XX
PD   28-SEP-2000.
XX
PF   23-MAR-2000; 2000WO-GB001102.
XX
PR   23-MAR-1999;   99US-0126046P.
PR   23-MAR-1999;   99WO-IB000497.
PR   24-MAR-1999;   99US-0126243P.
PR   23-DEC-1999;   99US-00471890.
XX
PA   (GEMI-) GEMINI GENOMICS AB.
XX
PI   Lindstrom PHR,  Norberg LT,  Jonsson L,  Olaisson E,  Sanders R;
XX
DR   WPI; 2000-638268/61.
XX
PT   Assessing disease status in individual by determining sequence(s) at one
PT   or more polymorphic positions within the human genes encoding the
PT   protein(s) involved in physiological pathway associated with treatment
PT   regime.
XX
PS   Example 1; Page 61; 141pp; English.
XX
CC   The present invention is related to methods for determining the
CC   polymorphic pattern of an individual and using the results to determine
CC   their risk of a number of diseases, including cancer, cardiovascular
CC   diseases, glaucoma and nervous system disorders such as depression and
CC   neurodegenerative diseases. In addition, the methods can be used to
CC   determine the effects of different types of treatment for individuals,
CC   and thus enables appropriate therapies to be prescribed. THe PCR primers
CC   shown in sequences AAC61201-C61371 were all used to demonstrate the
CC   methods of the invention
XX
SQ   Sequence 21 BP; 4 A; 8 C; 2 G; 7 T; 0 U; 0 Other;
```

```
  Query Match             0.4%;  Score 16.2;  DB 1;  Length 21;
  Best Local Similarity   85.7%;  Pred. No. 2e+02;
  Matches   18;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy         27 AGTGAGGATGATGCCAGGATG 47
              ||||||| ||||||||| | |
Db         21 AGTGAGGTTGATGCCAGAAAG 1
```

RESULT 135
AAF60173
ID AAF60173 standard; DNA; 21 BP.
XX
AC AAF60173;
XX
DT 27-APR-2001 (first entry)
XX
DE Human ATM gene exon 31 reverse primer.
XX
KW Human; ATM; ataxia telangiectasia; mutation detection;
KW single-stranded conformation polymorphism; SSCP; electrophoresis;
KW PCR primer; ss.
XX
OS Homo sapiens.
XX
PN WO200107660-A1.
XX
PD 01-FEB-2001.
XX
PF 21-JUL-2000; 2000WO-US020011.
XX
PR 23-JUL-1999; 99US-00360416.
XX
PA (REGC) UNIV CALIFORNIA.
XX
PI Gatti RA;
XX
DR WPI; 2001-168574/17.
XX
PT Detecting a mutation or polymorphism in human ataxia telangiectasia gene
PT or polyexonic eukaryotic gene, involves using mega-single stranded
PT comformation polymorphism analysis.
XX
PS Claim 7; Page 53; 118pp; English.
XX
CC The present sequence is one of a number of primers used in a method for
CC detecting a mutation or a polymorphism in the human ATM gene, which is
CC associated with the disease ataxia telangiectasia, or a polyexonic
CC eukaryotic gene of at least 4 kb. The method uses an improved version of
CC single-stranded conformation polymorphism (SSCP) electrophoresis that
CC allows electrophoresis of two or three amplified segments in a single
CC lane. The method is useful for screening large, complex polyexonic
CC eukaryotic genes such as the ATM gene for mutations and polymorphisms.
CC The new mutations and polymorphisms in the ATM gene are useful for
CC performing more accurate screening of human DNA samples for mutations,
CC for distinguishing mutations from polymorphisms, and for improving the
CC efficiency of automated screening methods. The mega-SSCP method provides
CC a screening method of genes for multiple polymorphisms and mutations at
CC once. The method is particularly suitable for large, polyexonic,
CC eukaryotic genes, having mutations and polymorphisms at many points and
CC not merely at one or a few hot spots. Note: the SEQ ID assigned to this
CC sequence in the disclosure and claims of the the specification is one
CC number lower than the number given in the sequence listing
XX
SQ Sequence 21 BP; 13 A; 2 C; 5 G; 1 T; 0 U; 0 Other;

```
  Query Match             0.4%;  Score 16.2;  DB 1;  Length 21;
  Best Local Similarity   85.7%;  Pred. No. 2e+02;
  Matches   18;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1842 AAAAAACAGGAACTACAGCAT 1862
              ||||||||||||  |||| ||
Db          1 AAAAAACAGGAAGAACAGGAT 21
```

RESULT 136
ABA05093
ID ABA05093 standard; DNA; 21 BP.
XX
AC ABA05093;
XX
DT 22-FEB-2002 (first entry)
XX
DE Dipeptide aminopeptidase 28 DNA related oligonucleotide #8.
XX
KW Human; dipeptide aminopeptidase 28; cancer; nosohaemia; cytostatic;
KW anti-HIV; immunosuppressive; antiinflammatory; HIV infection;
KW immunological disease; inflammation; gene therapy; ds.
XX
OS Unidentified.
XX
FH Key   Location/Qualifiers
FT CDS   1. .21
FT   /*tag= a
FT   /product= "AAM47329"
FT   /partial
FT   /note= "the sequence contains no start or stop codon"
XX
PN CN1307129-A.
XX
PD 08-AUG-2001.
XX
PF 03-FEB-2000; 2000CN-00112673.
XX
PR 03-FEB-2000; 2000CN-00112673.
XX
PA (JINP-) JINPENG BIO TECH CO LTD SHANGHAI.
XX
PI Wang J, Wang S, Tong B;
XX
DR WPI; 2002-034896/05.
DR P-PSDB; AAM47329.
XX
PT New polypeptide for treating malignant tumors and HIV infection,
PT comprises the human dipeptide aminopeptidase.
XX
PS Disclosure; Page 5(Disclosure); 11pp; Chinese.
XX
CC The present invention provides the protein and coding sequences of human
CC dipeptide aminopeptidase 28. The sequences can be used in the treatment
CC of cancer, nosohaemia, HIV infection, immunological diseases and
CC inflammation. The present sequence is a coding sequence fragment
CC described in the exemplification of the invention
XX
SQ Sequence 21 BP; 9 A; 1 C; 5 G; 6 T; 0 U; 0 Other;

```
  Query Match             0.4%;  Score 16.2;  DB 1;  Length 21;
  Best Local Similarity   85.7%;  Pred. No. 2e+02;
  Matches   18;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1127 AAGGGTAAAAGACTTTTCTTA 1147
              ||||||||||||| ||  |||
Db          1 AAGGGTAAAAGACGTTATTTA 21
```

RESULT 137
ADK00166/c
ID ADK00166 standard; DNA; 21 BP.
XX
AC ADK00166;
XX
DT 03-JUN-2004 (first entry)
XX
DE Murine pmn sequence tagged site PCR primer #2.
XX
KW nervous system; Tbce gene; CofE protein; tubulin-specific chaperone;

KW alpha-tubulin; beta-tubulin; progressive motor neuropathy; pmn;
KW chromosome 13; neuroprotective; nootropic; antiparkinsonian;
KW degenerative nerve disease; nerve injury; intoxication;
KW Alzheimer's disease; Parkinson's disease; neuropathy; multiple sclerosis;
KW ss; primer; PCR.
XX
OS Mus sp.
XX
PN WO2004020661-A2.
XX
PD 11-MAR-2004.
XX
PF 31-JUL-2003; 2003WO-DE002589.
XX
PR 26-AUG-2002; 2002DE-01039961.
XX
PA (MEDL-) MEDLNNOVA GES MEDIZINISCHE INNOVATIONEN.
XX
PI Sendtner M, Boemmel H;
XX
DR WPI; 2004-227242/21.
XX
PT New mutant form of the Tbce gene, useful for identifying diagnostic and
PT therapeutic agents for degenerative nerve diseases.
XX
PS Example 1; Fig 1; 34pp; German.
XX
CC This invention describes a novel isolated nucleic acid used in a test
CC system for discovering active agents for treating diseases of the nervous
CC system. The nucleic acid is a mutant form of the murine Tbce gene which
CC encodes the CofE protein, a tubulin-specific chaperone essential for
CC complexation of alpha- and beta-tubulins. The mutant gene has a T to G
CC alteration at position 1682, resulting in Gly rather than Trp at C-
CC terminal position 524 of the CofE protein (corresponding to position 527
CC of the human protein). This mutation is responsible for progressive motor
CC neuropathy (pmn) in mice. For diagnosis, a tissue sample or body fluid is
CC contacted with the identified diagnostic agent and binding determined,
CC qualitatively or (semi)quantitatively. The mutant Tbce gene may be
CC diagnosed by in vitro hybridisation to mutation-specific probes or by
CC using an antibody specific for the mutated protein. The system is
CC contacted with test compound and either the survival rate or the
CC formation of embryonal tubulin isoforms, class III beta-tubulin, ordered
CC tubulin aggregates, microtubuli and/or axons determined and optionally
CC compared with results of controls and/or of cells treated with a
CC reference compound. Compounds are selected if they increase cell survival
CC or modify formation of tubulin and/or axons. The novel mutation was
CC identified in pmn/pmn mice by typing a 31 cM region of chromosome 13. The
CC products of the invention have neuroprotective, nootropic and
CC antiparkinsonian activity and can be used and its derived peptide to
CC identify agents for diagnosis of degenerative nerve diseases and nerve
CC injury caused by intoxication and/or for treating nervous system
CC disorders such as Alzheimer's disease, Parkinson's disease, neuropathy
CC and multiple sclerosis. Tbce or its mutants are also useful in diagnosing
CC and treating the disorders. This sequence represents an inverse PCR
CC primer used to amplify murine pmn candidate region sequence tagged sites
CC (STS) found in YAC and BAC clones.
XX
SQ Sequence 21 BP; 5 A; 5 C; 6 G; 5 T; 0 U; 0 Other;

Query Match 0.4%; Score 16.2; DB 1; Length 21;
Best Local Similarity 85.7%; Pred. No. 2e+02;
Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

```
Qy        342 GACCTGAGCTTTAATCCCCTG 362
              ||||||| || ||||||| |
Db         21 GACCTGAGTTTGAATCCCCAG 1
```

RESULT 138
ADE27067
ID ADE27067 standard; RNA; 19 BP.
XX
AC ADE27067;
XX
DT 29-JAN-2004 (first entry)
XX
DE Stearoyl-CoA desaturase siNA oligonucleotide SEQ ID NO:11.
XX
KW short interfering nucleic acid; siNA; downregulation; inhibition; SCD;
KW stearoyl-CoA desaturase; RNA interference; anorectic; antidiabetic;
KW antiarteriosclerotic; cytostatic; virucide; obesity; diabetes;
KW atherosclerosis; cancer; viral infection; drug screening;
KW genetic engineering; pharmacogenomic; gene mapping; ss.
XX
OS Synthetic.
XX
PN WO2003070885-A2.
XX
PD 28-AUG-2003.
XX
PF 13-FEB-2003; 2003WO-US004317.
XX
PR 20-FEB-2002; 2002US-0358580P.
PR 11-MAR-2002; 2002US-0363124P.
PR 06-JUN-2002; 2002US-0386782P.
PR 29-AUG-2002; 2002US-0406784P.
PR 05-SEP-2002; 2002US-0408378P.
PR 09-SEP-2002; 2002US-0409293P.
PR 20-SEP-2002; 2002US-0412304P.
PR 15-JAN-2003; 2003US-0440129P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
PI Mcswiggen J, Beigelman L, Thompson J;
XX
DR WPI; 2003-721687/68.
XX
PT New short interfering nucleic acid, useful e.g. for treatment and
PT diagnosis of obesity or diabetes, downregulates expression of the
PT stearoyl-CoA desaturase gene.
XX
PS Example 3; SEQ ID NO 11; 139pp; English.
XX
CC The present invention describes a short interfering nucleic acid (siNA)
CC that downregulates expression of the SCD (stearoyl-CoA desaturase) gene
CC by RNA interference. Also described: (1) modulating expression of SCD
CC genes in cells, tissue explants or organisms by introduction of siNA; (2)
CC kits for in vitro or in vivo delivery of siNA; (3) conjugates and/or
CC complexes of siNA; and (4) vectors that express siNA. SCD inhibiting
CC siNAs have anorectic, antidiabetic, antiarteriosclerotic, cytostatic and
CC virucide activities. The siNAs can be used to modulate expression of SCD
CC genes, in cells, tissue explants or organisms, e.g. for treating obesity;
CC diabetes (types I and II); atherosclerosis; cancer and viral infections.
CC They can also be used for drug screening; diagnosis; target
CC identification and validation; genetic engineering; pharmacogenomics;
CC studying gene function and gene mapping (e.g. of single-nucleotide
CC polymorphisms). The present sequence represents an SCD siNA, which is
CC used in the exemplification of the present invention.
XX
SQ Sequence 19 BP; 2 A; 10 C; 5 G; 0 T; 2 U; 0 Other;

Query Match 0.4%; Score 16; DB 1; Length 19;
Best Local Similarity 87.5%; Pred. No. 1.8e+02;
Matches 14; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

```
Qy        190 CTCCGGAGCCTCAGCC 205
              |:||||||||:|||||
Db          4 CUCCGGAGCCUCAGCC 19
```

RESULT 139
ADE27357/c
ID ADE27357 standard; RNA; 19 BP.
XX
AC ADE27357;
XX

DT 29-JAN-2004 (first entry)
XX
DE Stearoyl-CoA desaturase siNA oligonucleotide SEQ ID NO:301.
XX
KW short interfering nucleic acid; siNA; downregulation; inhibition; SCD;
KW stearoyl-CoA desaturase; RNA interference; anorectic; antidiabetic;
KW antiarteriosclerotic; cytostatic; virucide; obesity; diabetes;
KW atherosclerosis; cancer; viral infection; drug screening;
KW genetic engineering; pharmacogenomic; gene mapping; ss.
XX
OS Synthetic.
XX
PN WO2003070885-A2.
XX
PD 28-AUG-2003.
XX
PF 13-FEB-2003; 2003WO-US004317.
XX
PR 20-FEB-2002; 2002US-0358580P.
PR 11-MAR-2002; 2002US-0363124P.
PR 06-JUN-2002; 2002US-0386782P.
PR 29-AUG-2002; 2002US-0406784P.
PR 05-SEP-2002; 2002US-0408378P.
PR 09-SEP-2002; 2002US-0409293P.
PR 20-SEP-2002; 2002US-0412304P.
PR 15-JAN-2003; 2003US-0440129P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
PI Mcswiggen J, Beigelman L, Thompson J;
XX
DR WPI; 2003-721687/68.
XX
PT New short interfering nucleic acid, useful e.g. for treatment and
PT diagnosis of obesity or diabetes, downregulates expression of the
PT stearoyl-CoA desaturase gene.
XX
PS Example 3; SEQ ID NO 301; 139pp; English.
XX
CC The present invention describes a short interfering nucleic acid (siNA)
CC that downregulates expression of the SCD (stearoyl-CoA desaturase) gene
CC by RNA interference. Also described: (1) modulating expression of SCD
CC genes in cells, tissue explants or organisms by introduction of siNA; (2)
CC kits for in vitro or in vivo delivery of siNA; (3) conjugates and/or
CC complexes of siNA; and (4) vectors that express siNA. SCD inhibiting
CC siNAs have anorectic, antidiabetic, antiarteriosclerotic, cytostatic and
CC virucide activities. The siNAs can be used to modulate expression of SCD
CC genes, in cells, tissue explants or organisms, e.g. for treating obesity;
CC diabetes (types I and II); atherosclerosis; cancer and viral infections.
CC They can also be used for drug screening; diagnosis; target
CC identification and validation; genetic engineering; pharmacogenomics;
CC studying gene function and gene mapping (e.g. of single-nucleotide
CC polymorphisms). The present sequence represents an SCD siNA, which is
CC used in the exemplification of the present invention.
XX
SQ Sequence 19 BP; 2 A; 5 C; 10 G; 0 T; 2 U; 0 Other;

Query Match 0.4%; Score 16; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 1.8e+02;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 190 CTCCGGAGCCTCAGCC 205
||||||||||||||||
Db 16 CTCCGGAGCCTCAGCC 1

RESULT 140
AAT77163/c
ID AAT77163 standard; DNA; 20 BP.
XX
AC AAT77163;
XX
DT 24-OCT-1997 (first entry)
XX
DE Batten disease gene exon 4 PCR primer.
XX
KW Batten disease; ceroid lipofuscinosis; CLN3; diagnosis; human;
KW gene therapy; polymerase chain reaction; PCR; primer; ss.
XX
OS Synthetic.
XX
PN WO9708308-A1.
XX
PD 06-MAR-1997.
XX
PF 30-AUG-1996; 96WO-US013896.
XX
PR 31-AUG-1995; 95US-0003030P.
XX
PA (GEHO) GEN HOSPITAL CORP.
PA (UYLE-) RIJKSUNIV LEIDEN.
XX
PI Lerner TJ, Taschner PEM, Breuning MH, Gusella JF, Mole SE;
PI Gardiner MR;
XX
DR WPI; 1997-179265/16.
XX
PT Batten disease polypeptide - useful to correct absence of wild type
PT polypeptide, or as agonist to enhance activity of wild type polypeptide.
XX
PS Disclosure; Page 31; 94pp; English.
XX
CC PCR primers (AAT61331 and AAT77158-86) were designed for amplification of
CC the human Batten disease CLN3 gene (see also AAT61306) exons 1-15. The
CC PCR primers for exon 4 are given in AAT77163 and AAT77164. Novel
CC mutations (see also AAT61332-48) have been discovered in the CLN3 gene of
CC Bd patients using a combination of PCR, single strand conformation
CC polymorphism analysis and direct sequencing
XX
SQ Sequence 20 BP; 6 A; 3 C; 8 G; 3 T; 0 U; 0 Other;

Query Match 0.4%; Score 16; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.9e+02;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2274 CAGCTCTGCCTTCACT 2289
||||||||||||||||
Db 19 CAGCTCTGCCTTCACT 4

RESULT 141
ABS65155/c
ID ABS65155 standard; DNA; 20 BP.
XX
AC ABS65155;
XX
DT 15-NOV-2002 (first entry)
XX
DE Mouse casein kinase 2-beta antisense oligonucleotide #14.
XX
KW ss; antisense; casein kinase2-beta; mouse; antisense gene therapy;
KW cytostatic; antidiabetic; antiinflammatory; diabetes; cancer; tumour;
KW hyperproliferative disorder; breast cancer; prostate cancer;
KW liver cancer.
XX
OS Mus musculus.
XX
FH Key Location/Qualifiers
FT modified_base 1. .20
FT /*tag= a
FT /mod_base= OTHER
FT /note= "All cytidines are 5-methylcytidines"
FT modified_base 1. .20
FT /*tag= b
FT /mod_base= OTHER
FT /note= "Phophorothioate backbone"

```
FT   modified_base   1. .5
FT                   /*tag=  c
FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethyl residues"
FT   modified_base   16. .20
FT                   /*tag=  d
FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethyl residues"
XX
PN   WO200262954-A2.
XX
PD   15-AUG-2002.
XX
PF   31-JAN-2002; 2002WO-US003159.
XX
PR   08-FEB-2001; 2001US-00780175.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Mckay R,  Freier SM,  Wyatt JR;
XX
DR   WPI; 2002-643409/69.
XX
PT   New antisense oligonucleotides targeted to nucleic acid encoding Casein
PT   kinase 2-beta, useful in diagnostic and research applications, or for
PT   treating a disease or condition associated with the expression of Casein
PT   kinase 2-beta.
XX
PS   Claim 3; Page 94; 142pp; English.
XX
CC   The invention relates to a compound that is 8 - 50 nucleobases in length
CC   targeted to a nucleic acid molecule encoding Casein kinase 2-beta, and
CC   which specifically hybridises with and inhibits the expression of Casein
CC   kinase 2-beta, or which specifically hybridises with an 8-nucleobase
CC   portion of an active site on a nucleic acid molecule encoding Casein
CC   kinase 2-beta. Also included are: (1) a composition comprising the
CC   compound, and a carrier or diluent; (2) inhibiting the expression of
CC   Casein kinase 2-beta in cells or tissues by contacting the cells or
CC   tissues with the compound so that the expression of Casein kinase 2-beta
CC   is inhibited; and (3) treating an animal having a disease or condition
CC   associated with Casein kinase 2-beta by administering to the animal the
CC   new compound so that the expression of Casein kinase 2-beta is inhibited.
CC   The antisense compounds are useful for modulating the expression of
CC   Casein kinase 2-beta and for treating diseases or conditions associated
CC   with expression of Casein kinase 2-beta, e.g. diabetes or
CC   hyperproliferative disorders, particularly cancer, such as breast cancer,
CC   prostate cancer, or liver cancer. The antisense compounds are also useful
CC   for diagnostics, therapeutics, prophylaxis, e.g. to prevent or delay
CC   infection, inflammation or tumour formation, as research reagents and
CC   kits, and in distinguishing between functions of various members of a
CC   biological pathway. The present sequence is an antisense oligonucleotide
CC   of the invention targeting mouse casein kinase 2-beta
XX
SQ   Sequence 20 BP; 6 A; 6 C; 6 G; 2 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 16;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1.9e+02;
  Matches   16;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        988 CTGCTCTAGAGGGCCT 1003
              ||||||||||||||||
Db         16 CTGCTCTAGAGGGCCT 1


RESULT 142
AAX09330
ID   AAX09330 standard; DNA; 19 BP.
XX
AC   AAX09330;
XX
DT   24-MAR-1999  (first entry)
XX
DE   Human biallelic polymorphic marker upstream primer #210.
XX
KW   Polymorphism; biallelic; human; forensic; paternity testing; disease;
KW   detection; phenotypic typing; characteristic; infection; hereditary;
KW   autoimmune disease; cancer; inflammation; drug; therapy; medicament;
KW   treatment; marker; primer; ss.
XX
OS   Synthetic.
OS   Homo sapiens.
XX
PN   WO9820165-A2.
XX
PD   14-MAY-1998.
XX
PF   05-NOV-1997;   97WO-US020313.
XX
PR   06-NOV-1996;   96US-0030455P.
XX
PA   (WHED ) WHITEHEAD INST BIOMEDICAL RES.
XX
PI   Lander ES,  Wang D,  Hudson T;
XX
DR   WPI; 1998-286974/25.
XX
PT   New isolated nucleic acid segments from the human genome - used for
PT   determining polymorphic forms for use in e.g. forensics, paternity
PT   testing or phenotypic typing for disease.
XX
PS   Claim 15; Page 71; 310pp; English.
XX
CC   AAX09121-X10268 are allele-specific oligonucleotide primers used in the
CC   isolation of various biallelic polymorphic markers found in the human
CC   genome (represented in AAX10269-X12937). These primers can be used in a
CC   method for determining polymorphic forms in an individual for use in e.g.
CC   forensics, paternity testing or for phenotypic typing for diseases such
CC   as agammaglobulinemia, diabetes insipidus, Lesch-Nyhan syndrome, muscular
CC   dystrophy, Wiskott-Aldrich syndrome, Fabry's disease, familial
CC   hypercholesterolemia, polycystic kidney disease, hereditary
CC   spherocytosis, von Willebrand's disease, tuberous sclerosis, hereditary
CC   haemorrhagic telangiectasia, familial colonic polyposis, Ehlers-Danlos
CC   syndrome, osteogenesis imperfecta, acute intermittent porphyria,
CC   autoimmune diseases, inflammation, cancer, diseases of the nervous
CC   system, infection by pathogenic microorganisms, and characteristics such
CC   as longevity, appearance (e.g. baldness, obesity), strength, speed,
CC   endurance, fertility, and susceptibility or receptivity to particular
CC   drugs or therapeutic treatments. The isolated polymorphic nucleic acid
CC   segments can also be used to produce medicaments for the treatment or
CC   prophylaxis of such diseases
XX
SQ   Sequence 19 BP; 5 A; 7 C; 5 G; 2 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 15.8;  DB 1;  Length 19;
  Best Local Similarity   89.5%;  Pred. No. 1.9e+02;
  Matches   17;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        186 CAGACTCCGGAGCCTCAGC 204
              ||||||| |||||| ||||
Db          1 CAGACTCTGGAGCCACAGC 19


RESULT 143
ACC70795
ID   ACC70795 standard; DNA; 19 BP.
XX
AC   ACC70795;
XX
DT   20-NOV-2003  (first entry)
XX
DE   Human Toll-like receptor 4, Tlr-4, PCR primer #1.
XX
KW   Human; PCR; primer; vulnerary; anti-tumour; antirheumatic; antiarthritic;
KW   antiarteriosclerotic; cytostatic; neointima; scar; plaque; blood vessel;
KW   Toll-like receptor 4; adventitial cell; Tlr-4; ss.
XX
```

OS Homo sapiens.
XX
PN EP1302206-A1.
XX
PD 16-APR-2003.
XX
PF 11-OCT-2001; 2001EP-00203846.
XX
PR 11-OCT-2001; 2001EP-00203846.
XX
PA (UYUT-) UNIV UTRECHT MEDISCH CENT.
PA (UYUT-) RIJKSUNIV UTRECHT.
XX
PI De Kleijn DPV, Pasterkamp G;
XX
DR WPI; 2003-484923/46.
XX
PT Interfering with the formation of a neointima/scar and/or a plaque in a
PT blood vessel, useful for modulating tumor growth, comprises providing a
PT ligand capable of modulating Toll-like receptor activity of adventitial
PT cells.
XX
PS Disclosure; Page 7; 23pp; English.
XX
CC The present invention relates to a method for interfering with the
CC formation of a neointima/scar and/or a plaque in a blood vessel by
CC providing a ligand capable of modulating Toll-like receptor activity of
CC adventitial cells. The method is useful for reducing the formation of a
CC neointima/scar and/or a plaque in a blood vessel after stenting,
CC angioplasty, heart transplantation, by pass surgery, arteriovenous
CC shunting and infection, especially bacterial infection. The method is
CC also useful for modulating tumour growth, and for modulating the effects
CC of rheumatoid arthritis. The present sequence is a PCR primer for human
CC Toll-like receptor 4 (Tlr-4)
XX
SQ Sequence 19 BP; 3 A; 8 C; 2 G; 6 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.8; DB 1; Length 19;
Best Local Similarity 89.5%; Pred. No. 1.9e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 2273 TCAGCTCTGCCTTCACTAC 2291
||||||||||| |||||
Db 1 TCAGCTCTGCCTCTACTAC 19

RESULT 144
ADE78588
ID ADE78588 standard; DNA; 19 BP.
XX
AC ADE78588;
XX
DT 29-JAN-2004 (first entry)
XX
DE Endogenous carotenoid gene expression RT-PCR primer #12.
XX
KW metabolite; carotene; plant; carotene hydroxylase; lycopene beta-cyclase;
KW beta-carotene hydroxylase; zeaxanthin; beta-carotene;
KW oxygenated carotenoid; RT-PCR; primer; carotenoid; ss.
XX
OS Unidentified.
XX
PN EP1323825-A2.
XX
PD 02-JUL-2003.
XX
PF 08-NOV-2002; 2002EP-00425681.
XX
PR 09-NOV-2001; 2001IT-RM000670.
XX
PA (CNEN) ENEA ENTE NUOVE TECNOLOGIE ENERGIA.
PA (BIOJ) BIOGEN SRL.
XX
PI Giuliano G, Rosati C, Dharmapuri S, Pallara P, Camara B;
XX
DR WPI; 2003-714401/68.
XX
PT Increasing the metabolites of carotene content in a plant useful for
PT producing recombinant plants comprises upregulating a gene encoding
PT carotene hydroxylase activity.
XX
PS Example 1; Page 12; 21pp; English.
XX
CC The invention relates to a novel process for increasing the metabolites
CC of carotene content of a plant. The novel process comprises upregulating
CC at least one gene which encodes carotene hydroxylase activity. The
CC compositions of the novel process have lycopene beta-cyclase or a beta-
CC carotene hydroxylase activity. The process is useful for increasing the
CC metabolites of carotene content of a plant, comprising transforming a
CC plant cell from which viable plants may be recovered, using a plant
CC expression cassette, or a DNA construct, and generating viable plants
CC from the cell. The carotene metabolites are useful for increasing
CC zeaxanthin and beta-carotene, including oxygenated carotenoids. This
CC polynucleotide sequence represents an RT-PCR primer used in the process
CC for the expression of the introduced proteins and endogenous carotenoid
CC genes of the invention.
XX
SQ Sequence 19 BP; 2 A; 6 C; 3 G; 8 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.8; DB 1; Length 19;
Best Local Similarity 89.5%; Pred. No. 1.9e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1716 TCACTCTCCAGTCTTCAGG 1734
|| || ||||||||||||||
Db 1 TCTCTTTCCAGTCTTCAGG 19

RESULT 145
ADF75738/c
ID ADF75738 standard; RNA; 19 BP.
XX
AC ADF75738;
XX
DT 26-FEB-2004 (first entry)
XX
DE Antisense siNA that down regulates human PTP-1B expression (SeqID 279).
XX
KW human; ss; siRNA; short interfering nucleic acid; siNA;
KW protein tyrosine phosphatase-1B; PTP-1B; RNA interference; RNAi;
KW micro-RNA; miRNA; short hairpin RNA; shRNA; gene silencing; antisense;
KW obesity; insulin resistance; diabetes; anorectic; antidiabetic;
KW antisense.
XX
OS Homo sapiens.
XX
PN WO2003070881-A2.
XX
PD 28-AUG-2003.
XX
PF 11-FEB-2003; 2003WO-US004123.
XX
PR 20-FEB-2002; 2002US-0358580P.
PR 11-MAR-2002; 2002US-0363124P.
PR 06-JUN-2002; 2002US-0386782P.
PR 26-JUL-2002; 2002US-00206705.
PR 29-AUG-2002; 2002US-0406784P.
PR 05-SEP-2002; 2002US-0408378P.
PR 09-SEP-2002; 2002US-0409293P.
PR 15-JAN-2003; 2003US-0440129P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
PI Mcswiggen J, Beigelman L, Usman N;
XX
DR WPI; 2003-697604/66.

```
XX
PT   New short interfering nucleic acid, useful e.g. for treatment and
PT   diagnosis of obesity, downregulates expression of a protein tyrosine
PT   phosphatase-1B gene.
XX
PS   Example 3; SEQ ID NO 279; 140pp; English.
XX
CC   This invention relates to novel short interfering nucleic acid (siNA)
CC   molecules that downregulate expression of a protein tyrosine phosphatase-
CC   1B (PTP-1B) gene by RNA interference (RNAi). Specifically, the siNAs can
CC   be short interfering RNA (siRNA), double-stranded RNA (dsRNA), micro-RNA
CC   (miRNA) or short hairpin RNA (shRNA), all of which can mediate inhibition
CC   of PTP-1B. The present invention describes sequence-specific post-
CC   trancriptional gene silencing in animals using siNA molecules and
CC   antisense oligonucleotides to modulate PTP-1B gene expression or
CC   activity. Furthermore, these siNA molecules provide useful reagents for a
CC   variety of therapeutic and diagnostic purposes, and as such can be used
CC   for treating obesity, insulin resistance or diabetes (types I and II), as
CC   well as for drug screening, target identification and validation, genetic
CC   engineering, pharmacogenomics and for studying gene function and gene
CC   mapping (for example of single-nucleotide polymorphisms). Accordingly,
CC   these molecules exhibit anorectic and antidiabetic activities. This
CC   oligonucleotide sequence is an antisense siNA molecule that targets human
CC   PTP-1B RNA of the invention.
XX
SQ   Sequence 19 BP; 7 A; 3 C; 7 G; 0 T; 2 U; 0 Other;

  Query Match             0.4%;  Score 15.8;  DB 1;  Length 19;
  Best Local Similarity   89.5%;  Pred. No. 1.9e+02;
  Matches   17;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       3162 TGCCCCTTCCATTTTAAGT 3180
              ||||||||||| ||| |||
Db         19 TGCCCCTTCCACTTTGAGT 1


RESULT 146
ADF75553
ID   ADF75553 standard; RNA; 19 BP.
XX
AC   ADF75553;
XX
DT   26-FEB-2004  (first entry)
XX
DE   Sense siNA that down regulates human PTP-1B expression (SeqID 94).
XX
KW   human; ss; siRNA; short interfering nucleic acid; siNA;
KW   protein tyrosine phosphatase-1B; PTP-1B; RNA interference; RNAi;
KW   micro-RNA; miRNA; short hairpin RNA; shRNA; gene silencing; antisense;
KW   obesity; insulin resistance; diabetes; anorectic; antidiabetic.
XX
OS   Homo sapiens.
XX
PN   WO2003070881-A2.
XX
PD   28-AUG-2003.
XX
PF   11-FEB-2003; 2003WO-US004123.
XX
PR   20-FEB-2002; 2002US-0358580P.
PR   11-MAR-2002; 2002US-0363124P.
PR   06-JUN-2002; 2002US-0386782P.
PR   26-JUL-2002; 2002US-00206705.
PR   29-AUG-2002; 2002US-0406784P.
PR   05-SEP-2002; 2002US-0408378P.
PR   09-SEP-2002; 2002US-0409293P.
PR   15-JAN-2003; 2003US-0440129P.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
XX
PI   Mcswiggen J,  Beigelman L,  Usman N;
XX
DR   WPI; 2003-697604/66.
```

```
XX
PT   New short interfering nucleic acid, useful e.g. for treatment and
PT   diagnosis of obesity, downregulates expression of a protein tyrosine
PT   phosphatase-1B gene.
XX
PS   Example 3; SEQ ID NO 94; 140pp; English.
XX
CC   This invention relates to novel short interfering nucleic acid (siNA)
CC   molecules that downregulate expression of a protein tyrosine phosphatase-
CC   1B (PTP-1B) gene by RNA interference (RNAi). Specifically, the siNAs can
CC   be short interfering RNA (siRNA), double-stranded RNA (dsRNA), micro-RNA
CC   (miRNA) or short hairpin RNA (shRNA), all of which can mediate inhibition
CC   of PTP-1B. The present invention describes sequence-specific post-
CC   trancriptional gene silencing in animals using siNA molecules and
CC   antisense oligonucleotides to modulate PTP-1B gene expression or
CC   activity. Furthermore, these siNA molecules provide useful reagents for a
CC   variety of therapeutic and diagnostic purposes, and as such can be used
CC   for treating obesity, insulin resistance or diabetes (types I and II), as
CC   well as for drug screening, target identification and validation, genetic
CC   engineering, pharmacogenomics and for studying gene function and gene
CC   mapping (for example of single-nucleotide polymorphisms). Accordingly,
CC   these molecules exhibit anorectic and antidiabetic activities. This
CC   oligonucleotide sequence is a sense siNA molecule that targets human PTP-
CC   1B RNA of the invention.
XX
SQ   Sequence 19 BP; 2 A; 7 C; 3 G; 0 T; 7 U; 0 Other;

  Query Match             0.4%;  Score 15.8;  DB 1;  Length 19;
  Best Local Similarity   52.6%;  Pred. No. 1.9e+02;
  Matches   10;  Conservative    7;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       3162 TGCCCCTTCCATTTTAAGT 3180
              :|||||::||| ::: ||:
Db          1 UGCCCCUUCCACUUUGAGU 19


RESULT 147
ADG34714/c
ID   ADG34714 standard; RNA; 19 BP.
XX
AC   ADG34714;
XX
DT   26-FEB-2004  (first entry)
XX
DE   Human TNF siNA oligonucleotide SEQ ID NO:66.
XX
KW   RNA interference; short interfering nucleic acid; siNA;
KW   short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;
KW   short hairpin RNA; shRNA; expression modulation; gene therapy;
KW   drug screening; diagnosis; therapeutic target identification;
KW   pharmacogenomics; gene function analysis; gene mapping;
KW   tumour necrosis factor; TNF; human; DNA-RNA hybrid; ss; antibacterial;
KW   immunosuppressive; antirheumatic; antiarthritic; anti-HIV; antipsoriatic;
KW   antiinflammatory; septic shock; rheumatoid arthritis; HIV/AIDS;
KW   psoriasis; inflammation; autoimmune disease; target sequence.
XX
OS   Synthetic.
OS   Homo sapiens.
XX
PN   WO2003070897-A2.
XX
PD   28-AUG-2003.
XX
PF   20-FEB-2003; 2003WO-US004741.
XX
PR   20-FEB-2002; 2002US-0358580P.
PR   11-MAR-2002; 2002US-0363124P.
PR   06-JUN-2002; 2002US-0386782P.
PR   29-AUG-2002; 2002US-0406784P.
PR   05-SEP-2002; 2002US-0408378P.
PR   09-SEP-2002; 2002US-0409293P.
PR   28-NOV-2002; 2002US-0429359P.
PR   15-JAN-2003; 2003US-0440129P.
```

XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
PI Mcswiggen J, Beigelman L;
XX
DR WPI; 2003-697609/66.
XX
PT New short interfering nucleic acid, useful e.g. for treatment and
PT diagnosis of septic shock or rheumatoid arthritis, downregulates
PT expression of the tumor necrosis factor gene.
XX
PS Example 3; SEQ ID NO 66; 141pp; English.
XX
CC The invention relates to short interfering nucleic acids (siNA) which
CC downregulate expression of the human tumour necrosis factor (TNF) gene by
CC RNA interference. The siNAs may or may not comprise ribonucleotides and
CC may be double or single stranded. They further comprise sense and
CC antisense regions, or alternatively are assembled from a sense
CC oligonucleotide and an antisense oligonucleotide. Specifically, the siNAs
CC include short interfering RNA (siRNA), double-stranded RNA, micro-RNA
CC (miRNA) and short hairpin RNA (shRNA). The siNAs can be unmodified or
CC chemically modified, can contain deoxyribonucleotides, and can be
CC chemically synthesised, expressed from a vector or enzymatically
CC synthesised. The invention also relates to kits for the in vitro or in
CC vivo delivery of siNA; conjugates and/or complexes of siNA; and vectors
CC that express siNA. The siNAs are used to modulate expression of the TNF
CC gene in cells, tissue explants or organisms (e.g., by ex vivo gene
CC therapy), or in grafts and transplants for the treatment of a variety of
CC conditions. The TNF siNAs have antibacterial, immunosuppressive,
CC antirheumatic, antiarthritic, anti-HIV, antipsoriatic and
CC antiinflammatory activities. They may be used for treating septic shock,
CC rheumatoid arthritis, HIV/AIDS, psoriasis, inflammation and autoimmune
CC diseases. The siNAs are also useful for drug screening, diagnosis,
CC therapeutic target identification and validation, genetic engineering,
CC pharmacogenomics, studying gene function, and gene mapping (e.g., of
CC single nucleotide polymorphisms). The present sequence represents the
CC upper strand of a human TNF-targeted double-stranded siNA, which is
CC identical to the TNF transcript target sequence.
XX
SQ Sequence 19 BP; 4 A; 5 C; 3 G; 0 T; 7 U; 0 Other;

```
  Query Match             0.4%;  Score 15.8;  DB 1;  Length 19;
  Best Local Similarity   89.5%;  Pred. No. 1.9e+02;
  Matches   17;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       3414 TTTCAAGGAAGTATGGAAA 3432
              | |||||||||| ||||||
Db         19 TCTCAAGGAAGTCTGGAAA 1
```

RESULT 148
ADG34802
ID ADG34802 standard; RNA; 19 BP.
XX
AC ADG34802;
XX
DT 26-FEB-2004 (first entry)
XX
DE Human TNF siNA oligonucleotide SEQ ID NO:154.
XX
KW RNA interference; short interfering nucleic acid; siNA;
KW short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;
KW short hairpin RNA; shRNA; expression modulation; gene therapy;
KW drug screening; diagnosis; therapeutic target identification;
KW pharmacogenomics; gene function analysis; gene mapping;
KW tumour necrosis factor; TNF; human; DNA-RNA hybrid; ss; antibacterial;
KW immunosuppressive; antirheumatic; antiarthritic; anti-HIV; antipsoriatic;
KW antiinflammatory; septic shock; rheumatoid arthritis; HIV/AIDS;
KW psoriasis; inflammation; autoimmune disease.
XX
OS Synthetic.
OS Homo sapiens.
XX
PN WO2003070897-A2.
XX
PD 28-AUG-2003.
XX
PF 20-FEB-2003; 2003WO-US004741.
XX
PR 20-FEB-2002; 2002US-0358580P.
PR 11-MAR-2002; 2002US-0363124P.
PR 06-JUN-2002; 2002US-0386782P.
PR 29-AUG-2002; 2002US-0406784P.
PR 05-SEP-2002; 2002US-0408378P.
PR 09-SEP-2002; 2002US-0409293P.
PR 28-NOV-2002; 2002US-0429359P.
PR 15-JAN-2003; 2003US-0440129P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
PI Mcswiggen J, Beigelman L;
XX
DR WPI; 2003-697609/66.
XX
PT New short interfering nucleic acid, useful e.g. for treatment and
PT diagnosis of septic shock or rheumatoid arthritis, downregulates
PT expression of the tumor necrosis factor gene.
XX
PS Example 3; SEQ ID NO 154; 141pp; English.
XX
CC The invention relates to short interfering nucleic acids (siNA) which
CC downregulate expression of the human tumour necrosis factor (TNF) gene by
CC RNA interference. The siNAs may or may not comprise ribonucleotides and
CC may be double or single stranded. They further comprise sense and
CC antisense regions, or alternatively are assembled from a sense
CC oligonucleotide and an antisense oligonucleotide. Specifically, the siNAs
CC include short interfering RNA (siRNA), double-stranded RNA, micro-RNA
CC (miRNA) and short hairpin RNA (shRNA). The siNAs can be unmodified or
CC chemically modified, can contain deoxyribonucleotides, and can be
CC chemically synthesised, expressed from a vector or enzymatically
CC synthesised. The invention also relates to kits for the in vitro or in
CC vivo delivery of siNA; conjugates and/or complexes of siNA; and vectors
CC that express siNA. The siNAs are used to modulate expression of the TNF
CC gene in cells, tissue explants or organisms (e.g., by ex vivo gene
CC therapy), or in grafts and transplants for the treatment of a variety of
CC conditions. The TNF siNAs have antibacterial, immunosuppressive,
CC antirheumatic, antiarthritic, anti-HIV, antipsoriatic and
CC antiinflammatory activities. They may be used for treating septic shock,
CC rheumatoid arthritis, HIV/AIDS, psoriasis, inflammation and autoimmune
CC diseases. The siNAs are also useful for drug screening, diagnosis,
CC therapeutic target identification and validation, genetic engineering,
CC pharmacogenomics, studying gene function, and gene mapping (e.g., of
CC single nucleotide polymorphisms). The present sequence represents the
CC lower strand of a human TNF-targeted double-stranded siNA.
XX
SQ Sequence 19 BP; 7 A; 3 C; 5 G; 0 T; 4 U; 0 Other;

```
  Query Match             0.4%;  Score 15.8;  DB 1;  Length 19;
  Best Local Similarity   68.4%;  Pred. No. 1.9e+02;
  Matches   13;  Conservative    4;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       3414 TTTCAAGGAAGTATGGAAA 3432
              : :|||||||: :|||||
Db          1 UCUCAAGGAAGUCUGGAAA 19
```

RESULT 149
ADR78541/c
ID ADR78541 standard; DNA; 19 BP.
XX
AC ADR78541;
XX
DT 16-DEC-2004 (first entry)
XX
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3026.
XX

```
KW   antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
KW   cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;
KW   RNA interference; iRNA; antisense technology; lipid metabolism;
KW   cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW   coronary artery disease; CAD; coronary heart disease; CHD;
KW   atherosclerosis; hepatic glucose production;
KW   glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW   colon cancer; lung cancer; neurological disease; Huntington disease;
KW   spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
OS   Homo sapiens.
XX
PN   WO2004080406-A2.
XX
PD   23-SEP-2004.
XX
PF   08-MAR-2004; 2004WO-US007070.
XX
PR   07-MAR-2003; 2003US-0452682P.
PR   12-MAR-2003; 2003US-0454265P.
PR   13-MAR-2003; 2003US-0454962P.
PR   13-MAR-2003; 2003US-0455050P.
PR   14-APR-2003; 2003US-0462894P.
PR   17-APR-2003; 2003US-0463772P.
PR   25-APR-2003; 2003US-0465665P.
PR   25-APR-2003; 2003US-0465802P.
PR   09-MAY-2003; 2003US-0469612P.
PR   08-AUG-2003; 2003US-0493986P.
PR   11-AUG-2003; 2003US-0494597P.
PR   26-SEP-2003; 2003US-0506341P.
PR   09-OCT-2003; 2003US-0510246P.
PR   10-OCT-2003; 2003US-0510318P.
PR   07-NOV-2003; 2003US-0518453P.
XX
PA   (ALNY-) ALNYLAM PHARM.
XX
PI   Manoharan M,  Bumcrot D;
XX
DR   WPI; 2004-677362/66.
XX
PT   Interference RNA agent useful for treating dyslipidemias, coronary artery
PT   disease, diabetes, cancer or neurological disease, comprises sense
PT   sequence and antisense sequence which has specific modifications.
XX
PS   Example 5; SEQ ID NO 3026; 378pp; English.
XX
CC   The invention describes a RNA interference (iRNA) agent (I) comprising a
CC   sense sequence and an antisense sequence, where the sense sequences have
CC   one or more asymmetrical 2'-O alkyl modifications, the antisense
CC   sequences have one or more asymmetrical phosphorothioate modifications
CC   and the antisense sequence targets a human gene sequence. Also described
CC   are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
CC   levels or glucose-6-phosphatase levels in a subject; producing (I);
CC   stabilising (I), involves selecting a sequence with activity and
CC   introducing one or more asymmetrical modification in the sequence, where
CC   the modification decreases nuclease sensitivity while not decreasing its
CC   activity; a kit comprising (I) and instruction for its use; and a device
CC   that can be dispense or administer a composition comprising (I). (I) is
CC   useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC   is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
CC   The subject is suffering from a disorder characterised by elevated or
CC   otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC   levels of cholesterol, and/or disregulation of lipid metabolism. The
CC   disorder is chosen from the HDL/LDL cholesterol imbalance,
CC   dyslipidaemias, hypercholestorolaemia, statin-resistant
CC   hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC   disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC   inhibit hepatic glucose production or for treating glucose-metabolism-
CC   related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC   treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC   lung cancer), neurological disease (e.g., Huntington disease or
CC   spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC   represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC   can be used to control ApoB gene expression.
XX
SQ   Sequence 19 BP; 9 A; 5 C; 1 G; 4 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 15.8;  DB 1;  Length 19;
  Best Local Similarity   89.5%;  Pred. No. 1.9e+02;
  Matches   17;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       3699 AGATGTTTATTTTTTCAG 3717
              ||||| ||| |||||||||
Db         19 AGATGGTTAGTTTTTTCAG 1


RESULT 150
ADR75923/c
ID   ADR75923 standard; DNA; 19 BP.
XX
AC   ADR75923;
XX
DT   16-DEC-2004  (first entry)
XX
DE   Human apolipoprotein B (ApoB) oligonucleotide seqid 408.
XX
KW   antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
KW   cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;
KW   RNA interference; iRNA; antisense technology; lipid metabolism;
KW   cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW   coronary artery disease; CAD; coronary heart disease; CHD;
KW   atherosclerosis; hepatic glucose production;
KW   glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW   colon cancer; lung cancer; neurological disease; Huntington disease;
KW   spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
OS   Homo sapiens.
XX
PN   WO2004080406-A2.
XX
PD   23-SEP-2004.
XX
PF   08-MAR-2004; 2004WO-US007070.
XX
PR   07-MAR-2003; 2003US-0452682P.
PR   12-MAR-2003; 2003US-0454265P.
PR   13-MAR-2003; 2003US-0454962P.
PR   13-MAR-2003; 2003US-0455050P.
PR   14-APR-2003; 2003US-0462894P.
PR   17-APR-2003; 2003US-0463772P.
PR   25-APR-2003; 2003US-0465665P.
PR   25-APR-2003; 2003US-0465802P.
PR   09-MAY-2003; 2003US-0469612P.
PR   08-AUG-2003; 2003US-0493986P.
PR   11-AUG-2003; 2003US-0494597P.
PR   26-SEP-2003; 2003US-0506341P.
PR   09-OCT-2003; 2003US-0510246P.
PR   10-OCT-2003; 2003US-0510318P.
PR   07-NOV-2003; 2003US-0518453P.
XX
PA   (ALNY-) ALNYLAM PHARM.
XX
PI   Manoharan M,  Bumcrot D;
XX
DR   WPI; 2004-677362/66.
XX
PT   Interference RNA agent useful for treating dyslipidemias, coronary artery
PT   disease, diabetes, cancer or neurological disease, comprises sense
PT   sequence and antisense sequence which has specific modifications.
XX
PS   Example 5; SEQ ID NO 408; 378pp; English.
XX
CC   The invention describes a RNA interference (iRNA) agent (I) comprising a
CC   sense sequence and an antisense sequence, where the sense sequences have
CC   one or more asymmetrical 2'-O alkyl modifications, the antisense
CC   sequences have one or more asymmetrical phosphorothioate modifications
```

CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or disregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholestorolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
SQ Sequence 19 BP; 9 A; 5 C; 1 G; 4 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.8; DB 1; Length 19;
Best Local Similarity 89.5%; Pred. No. 1.9e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

```
Qy       3699 AGATGTTTATTTTTTTCAG 3717
              ||||| ||| |||||||||
Db         19 AGATGGTTAGTTTTTTCAG 1
```

RESULT 151
AAX59720
ID AAX59720 standard; DNA; 20 BP.
XX
AC AAX59720;
XX
DT 22-JUL-1999 (first entry)
XX
DE Modified oligonucleotide containing N3'-P5' phosphoramidates.
XX
KW Oligodeoxyribonucleotide; intersubunit linkage;
KW phosphoramidate intersubunit; antisense activity; nuclease resistant;
KW in-vitro cell growth inhibition assay; infection;
KW smooth muscle cell proliferation disorder; inflammatory process;
KW genetic disorder; cancer; ss.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT modified_base 1. .8
FT /*tag= a
FT /note= "each base is linked by N3'-P5' phosphoramidate
FT linkages"
XX
PN WO9525814-A1.
XX
PD 28-SEP-1995.
XX
PF 20-MAR-1995; 95WO-US003575.
XX
PR 18-MAR-1994; 94US-00210505.
PR 18-MAR-1994; 94US-00214599.
XX
PA (LYNX-) LYNX THERAPEUTICS INC.
XX
PI Gryaznov SM, Schultz RG, Chen J;
XX
DR WPI; 1995-344627/44.
XX
PT Oligo:nucleotide N3'-P5' phosphoramidate(s) - have improved resistance
PT toward phosphodiesterase digestion, and form stable duplexes with DNA and
PT RNA strands.
XX
PS Disclosure; Page 55; 101pp; English.
XX
CC The specification describes oligodeoxyribonucleotides having contiguous
CC nucleoside subunits joined by intersubunit linkages, where at least 3
CC contiguous subunits are joined by phosphoramidate intersubunits. The
CC oligodeoxyribonucleotides has a sequence of nucleoside subunits effective
CC to form a duplex with a target nucleic acid molecule. The
CC oligodeoxyribonucleotides are more resistant to nuclease digestion and
CC have improved RNA and dsDNA hybridisation characteristics, relative to
CC oligonucleotides not containing N3'-P5' phosphoramidate linkages. They
CC also have excellent antisense activity against complementary mRNA targets
CC in in-vitro cell growth inhibition assays. They also exhibit low
CC cytotoxicity. They may be used in diagnostic and therapeutic
CC applications, e.g., in combatting infections agents such as bacteria,
CC viruses, etc. or in treatment of smooth muscle cell proliferation
CC disorders, inflammatory processes, certain genetic disorders, cancers,
CC etc. . The present sequence represents an oligonucleotide of the invention
XX
SQ Sequence 20 BP; 8 A; 0 C; 0 G; 12 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 2e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

```
Qy       3303 TATTTTTATTTTTATATAT 3321
              ||| | ||||||||||||||
Db          1 TATATATATTTTTATATAT 19
```

RESULT 152
AAV52722/c
ID AAV52722 standard; DNA; 20 BP.
XX
AC AAV52722;
XX
DT 21-DEC-1998 (first entry)
XX
DE DCoH (PCBD) gene exon 4 PCR primer.
XX
KW Hepatocyte nuclear factor 1 beta; HNF-1 beta; MODY4; human;
KW transcription factor; maturity onset diabetes of the young; TCF2;
KW diabetes; NIDDM; diagnosis; therapy; DCoH; PCBD; PCR; primer; ss.
XX
OS Synthetic.
OS Homo sapiens.
XX
PN WO9811254-A1.
XX
PD 19-MAR-1998.
XX
PF 10-SEP-1997; 97WO-US016037.
XX
PR 10-SEP-1996; 96US-0025719P.
PR 02-OCT-1996; 96US-0028056P.
PR 30-OCT-1996; 96US-0029679P.
XX
PA (ARCH-) ARCH DEV CORP.
XX
PI Bell GI, Yamagata K, Oda N, Kaisaki PJ, Furuta H, Menzel S;
PI Horikawa Y;
XX
DR WPI; 1998-271667/24.
XX
PT Isolated nucleic acid encoding hepatocyte nuclear factor 1-alpha and 1-
PT beta - useful for detecting susceptibility for non-insulin dependent
PT diabetes, especially maturity-onset diabetes of the young.
XX

```
PS   Example 8; Page 146; 363pp; English.
XX
CC   This is a reverse PCR primer designed for use with a forward primer (see
CC   AAV52721) in the PCR amplification of exon 4 of the human DCoH (PCBD)
CC   gene. The bifunctional DCoH/PCBD protein stabilises dimers of hepatocyte
CC   nuclear factor-1 beta (HNF-1 beta, see AAW71581) with itself or with HNF-
CC   1 alpha (see AAW71559). Mutations of HNF are associated with MODY
CC   (maturity onset diabetes of the young) type diabetes. No diabetes-
CC   associated mutations were found in DCoH
XX
SQ   Sequence 20 BP; 4 A; 7 C; 4 G; 5 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 15.8;  DB 1;  Length 20;
  Best Local Similarity   89.5%;  Pred. No. 2e+02;
  Matches   17;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       3068 TGACTGAACTGGGTGTTCA 3086
              ||||||||||||| || ||
Db         20 TGACTGAACTGGGAGTCCA 2


RESULT 153
AAV48008/c
ID   AAV48008 standard; DNA; 20 BP.
XX
AC   AAV48008;
XX
DT   19-OCT-1998  (first entry)
XX
DE   Human B7-1 targetted oligonucleotide 12370.
XX
KW   ss; human; B7; T cell; inflammation; autoimmune disease; cell activation;
KW   cell proliferation.
XX
OS   Synthetic.
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .5
FT                   /*tag=  a
FT                   /note= "Optional phosphorothioate linkages, optionally
FT                   modified with 2'fluoro-1 or 2'-methoxyethoxy"
FT   modified_base   6. .14
FT                   /*tag=  b
FT                   /note= "Phosphorothioate linkages"
FT   modified_base   14. .20
FT                   /tag= c
FT                   /note= "optionally modified with 2'-methoxyethoxy"
FT   modified_base   15. .20
FT                   /*tag=  d
FT                   /note= "Optional phosphorothioate linkages, optionally
FT                   modified with 2'fluoro-1"
XX
PN   WO9829124-A1.
XX
PD   09-JUL-1998.
XX
PF   16-DEC-1997;   97WO-US023270.
XX
PR   31-DEC-1996;   96US-00777266.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Bennett CF,  Vickers TA;
XX
DR   WPI; 1998-387783/33.
XX
PT   New oligo:nucleotide(s) that modulate expression of B7 proteins - used
PT   for, e.g. controlling activation and proliferation of T cells,
PT   particularly for treatment, diagnosis and prevention of inflammation.
XX
PS   Example 1; Page 35; 120pp; English.
XX
CC   The oligonucleotides which specifically hybridise to B7 modulate its
CC   expression (and thus T cell activation and proliferation). This is
CC   particularly useful for treatment and prevention of inflammation and
CC   autoimmune diseases, e.g. asthma, (juvenile) diabetes, myasthenia gravis,
CC   Grave's disease, rheumatoid arthritis, allograft rejection, psoriasis,
CC   (systemic) lupus erythematosus, multiple sclerosis, contact dermatitis,
CC   rhinitis, allergy, cancer and metastases. The oligonucleotides may also
CC   be used to manipulate T cell activation ex vivo; to determine or detect
CC   B7 protein expression; for diagnosis; as assay and purification reagents,
CC   and to study physiological roles of B7 proteins
XX
SQ   Sequence 20 BP; 7 A; 4 C; 8 G; 1 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 15.8;  DB 1;  Length 20;
  Best Local Similarity   89.5%;  Pred. No. 2e+02;
  Matches   17;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       3766 TGGCTGGGATCCCTCCCCT 3784
              ||||||| ||||||| |||
Db         20 TGGCTGGCATCCCTCTCCT 2


RESULT 154
AAZ37657/c
ID   AAZ37657 standard; DNA; 20 BP.
XX
AC   AAZ37657;
XX
DT   07-JAN-2000  (first entry)
XX
DE   Human mdm2 phosphorothioate oligodeoxynucleotide #187.
XX
KW   Human mdm2 gene; proliferation; tumour; phosphorothioate; p53; cancer;
KW   antisense; modulation; oligonucleotide; expression; inhibition;
KW   hyperproliferation; blood cancer; brain cancer; breast cancer;
KW   lung cancer; soft tissue cancer; psoriasis; fibrosis; atherosclerosis;
KW   restenosis; ss.
XX
OS   Synthetic.
OS   Homo sapiens.
XX
PN   WO9949065-A1.
XX
PD   30-SEP-1999.
XX
PF   26-MAR-1999;   99WO-US006702.
XX
PR   26-MAR-1998;   98US-00048810.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Miraglia LJ,  Nero P,  Graham MJ,  Monia BP,  Cowsert LM;
XX
DR   WPI; 1999-610754/52.
XX
PT   New antisense compounds used to treat eg. hyperproliferative conditions.
XX
PS   Example 9; Page 52; 157pp; English.
XX
CC   AAZ37473-Z37738 represent human mdm2 phosphorothioate oligonucleotides.
CC   AAZ37471, AAZ37472, AAZ37739, AAZ37740 and AAZ37741 are used in the
CC   exemplification of the present invention. The present invention describes
CC   novel nucleotide antisense compounds, targetted to the 5' untranslated,
CC   translation termination codon, or 3' untranslated region of a nucleic
CC   acid encoding human mdm2, that modulates expression of human mdm2. The
CC   oligonucleotides mediate their effect by antisense inhibition of
CC   hyperproliferative gene expression. The antisense compound is used to
CC   treat an animal having a disease or condition associated with mdm2,
CC   particularly a hyperproliferative condition, more particularly cancer,
CC   especially of the blood, brain, breast, lung or soft tissue, or
CC   psoriasis, fibrosis, atherosclerosis or restenosis
XX
SQ   Sequence 20 BP; 0 A; 4 C; 4 G; 12 T; 0 U; 0 Other;
```

```
  Query Match             0.4%;  Score 15.8;  DB 1;  Length 20;
  Best Local Similarity   89.5%;  Pred. No. 2e+02;
  Matches   17;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       2916 AAGGAACCCATGACAAAGA 2934
              ||| |||||| ||||||||
Db         19 AAGAAACCCAAGACAAAGA 1
```

RESULT 155
AAX36672
ID AAX36672 standard; DNA; 20 BP.
XX
AC AAX36672;
XX
DT 13-JUL-1999 (first entry)
XX
DE PCR primer for marker D6S967.
XX
KW PCR primer; detection; glaucoma allele; haplotype analysis; human; GLC1B;
KW chromosome 2; chromosome 6; GLC6p25; haplotype profile;
KW presymptomatic glaucoma; symptomatic glaucoma; ss.
XX
OS Synthetic.
OS Homo sapiens.
XX
PN WO9916899-A2.
XX
PD 08-APR-1999.
XX
PF 29-SEP-1998; 98WO-CA000924.
XX
PR 30-SEP-1997; 97CA-02217097.
XX
PA (UYLA-) UNIV LAVAL.
XX
PI Raymond V, Morissette J, Falardeau P, Cote G, Anctil J;
XX
DR WPI; 1999-263704/22.
XX
PT Haplotype analyses for indirect detection of glaucoma.
XX
PS Claim 18; Page 28; 41pp; English.
XX
CC This sequence represents a PCR primer used in the method of the
CC invention. The method is for detecting the presence of alleles for
CC glaucoma comprising haplotype analysis of human chromosome 2 and 6
CC respectively, where the haplotypes are associated with loci GLC1B and
CC GLC6p25 respectively. The primers are used to amplify gene sequences to
CC generate information necessary to compile haplotype profiles. The
CC haplotype profiles can be used to detect presymptomatic and symptomatic
CC glaucoma. They can also be used to localise, isolate and identify the
CC GLC1B and GLC6p25 loci so that detection of individuals with glaucoma is
CC enhanced. The haplotype analyses also provide means for identification
CC and following of mutant alleles in pedigrees or populations.
CC Identification of presymptomatic individuals using the methods allows
CC intervention in the disease process and obviates the impact of inheriting
CC a mutant allele causing disease, by medically disrupting the initiation
CC or progression of the disease
XX
SQ Sequence 20 BP; 6 A; 3 C; 4 G; 7 T; 0 U; 0 Other;

```
  Query Match             0.4%;  Score 15.8;  DB 1;  Length 20;
  Best Local Similarity   89.5%;  Pred. No. 2e+02;
  Matches   17;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       3735 GGACCTATGAATCTATTTA 3753
              ||| || ||||||||||||
Db          1 GGAACTGTGAATCTATTTA 19
```

RESULT 156

AAA41139
ID AAA41139 standard; DNA; 20 BP.
XX
AC AAA41139;
XX
DT 16-AUG-2000 (first entry)
XX
DE Human TNFalpha antisense oligonucleotide ISIS# 104785.
XX
KW Antisense oligonucleotide; phosphorothioate; TNFalpha; cytokine; inhibit;
KW tumour necrosis factor alpha; inflammatory bowel disease; diabetes;
KW rheumatoid arthritis; infectious disease; multiple sclerosis; hepatitis;
KW pancreatitis; atopic dermatitis; allograft rejection; autoimmune disease;
KW inflammatory disease; ss.
XX
OS Synthetic.
XX
PN WO200020645-A1.
XX
PD 13-APR-2000.
XX
PF 05-OCT-1999; 99WO-US023205.
XX
PR 05-OCT-1998; 98US-00166186.
PR 18-MAY-1999; 99US-00313932.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Baker BF, Bennett CF, Butler MM, Shanahan WJ;
XX
DR WPI; 2000-303808/26.
XX
PT Oligonucleotide for treating diseases associated with human tumor
PT necrosis factor-alpha (TNF-alpha) such as, diabetes and rheumatoid
PT arthritis, comprises nucleotide sequence complementary to intron of
PT nucleic acid encoding TNF-alpha.
XX
PS Example 22; Page 104; 283pp; English.
XX
CC This sequence represents an antisense oligonucleotide sequence which
CC targets a region of the human tumour necrosis factor alpha (TNFalpha)
CC nucleotide sequence. TNFalpha is an important cytokine that plays a role
CC in host defence. It is produced mainly in macrophages and monocytes in
CC response to infection, invasion, injury or inflammation. Overexpression
CC of TNFalpha can result in disease states, particularly in infectious,
CC inflammatory and autoimmune diseases. The invention relates to antisense
CC oligonucleotides, such as that represented by the present sequence which
CC are capable of modulating the TNFalpha gene expression. The
CC oligonucleotides optionally have a phosphorothioate backbone, and may
CC also optionally contain at least one 2'-O-methoxyethyl modification. The
CC oligonucleotides are useful for modulating the expression of human
CC TNFalpha in cells and tissues, reducing a human cell inflammatory
CC response, reducing the blood glucose level in a human and treating a
CC human having a disease or condition associated with TNFalpha. Examples of
CC diseases associated with TNFalpha include diabetes, inflammatory bowel
CC disease, multiple sclerosis, pancreatitis, rheumatoid arthritis,
CC infectious disease, hepatitis, atopic dermatitis or allograft rejection.
CC The antisense oligonucleotides are also useful for modulating the
CC function of a selected nucleic acid sequence in adipose tissue
XX
SQ Sequence 20 BP; 7 A; 4 C; 5 G; 4 T; 0 U; 0 Other;

```
  Query Match             0.4%;  Score 15.8;  DB 1;  Length 20;
  Best Local Similarity   89.5%;  Pred. No. 2e+02;
  Matches   17;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       3414 TTTCAAGGAAGTATGGAAA 3432
              | |||||||||| ||||||
Db          1 TCTCAAGGAAGTCTGGAAA 19
```

RESULT 157
AAF32850/c

```
ID   AAF32850 standard; DNA; 20 BP.
XX
AC   AAF32850;
XX
DT   23-MAR-2001  (first entry)
XX
DE   Human B7-1 mRNA antisense oligonucleotide SEQ ID NO: 47.
XX
KW   Human; mouse; B7-1; B7-2; antisense; PCR primer; inflammation;
KW   autoimmune disorder; phosphorothioate backbone; ss.
XX
OS   Homo sapiens.
XX
PN   WO200074687-A1.
XX
PD   14-DEC-2000.
XX
PF   25-MAY-2000; 2000WO-US014471.
XX
PR   04-JUN-1999;   99US-00326186.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Bennett CF,  Vickers TA,  Karras JG;
XX
DR   WPI; 2001-049991/06.
XX
PT   Novel compound for diagnosing, preventing and treating immune disorders,
PT   comprising an oligonucleotide that specifically hybridizes with a nucleic
PT   acid sequence encoding B7 protein.
XX
PS   Example 1; Page 47; 162pp; English.
XX
CC   The present invention provides sequences of antisense oligonucleotides
CC   targeted at the murine and human B7-1 and B7-2 coding and mRNA sequences.
CC   The antisense sequences have phosphorothioate backbones and some
CC   nucleotides are 2'-methoxyethoxy residues. The sequences can be used in
CC   the treatment of inflammatory and autoimmune disorders, including asthma,
CC   juvenile diabetes mellitus, myasthenia gravis, Graves' disease,
CC   rheumatoid arthritis, allograft rejection, inflammatory bowel disease,
CC   multiple sclerosis, psoriasis, systemic lupus erythematosus, contact
CC   dermatitis, rhinitis, allergies and cancer
XX
SQ   Sequence 20 BP; 7 A; 4 C; 8 G; 1 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 15.8;  DB 1;  Length 20;
  Best Local Similarity   89.5%;  Pred. No. 2e+02;
  Matches   17;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       3766 TGGCTGGGATCCCTCCCCT 3784
              ||||||| ||||||| |||
Db         20 TGGCTGGCATCCCTCTCCT 2


RESULT 158
AAF80811/c
ID   AAF80811 standard; DNA; 20 BP.
XX
AC   AAF80811;
XX
DT   02-MAY-2001  (first entry)
XX
DE   Human mdm2 phosphorothioate oligonucleotide #185.
XX
KW   Antisense; mdm2; hyperproliferation; cancer; psoriasis; ss.
XX
OS   Homo sapiens.
XX
PN   US6184212-B1.
XX
PD   06-FEB-2001.
XX
PF   26-MAR-1999;   99US-00280805.
XX
PR   26-MAR-1998;   98US-00048810.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Miraglia LJ,  Nero P,  Graham MJ,  Monia BP,  Cowsert LM;
XX
DR   WPI; 2001-190948/19.
XX
PT   Novel antisense compound 8-30 nucleobases in length targeted to a nucleic
PT   acid molecule encoding human mdm-2 useful for modulating the expression
PT   of human mdm-2 and reducing hyperproliferation of human cells.
XX
PS   Example 9; Col 31; 77pp; English.
XX
CC   The present invention relates to an antisense compound 8-30 nucleobases
CC   in length targeted to nucleobases 1-308 of the 5' untranslated region,
CC   1776-1806 of the translation termination codon region or 1818-2370 of the
CC   3' untranslated region of a nucleic acid molecule encoding human mdm-2.
CC   The invention is useful for reducing hyperproliferation of human cells,
CC   modulating the expression of mdm2 in human cells or tissues or in vitro.
CC   The hyperproliferative disorder includes cancer or psoriasis
XX
SQ   Sequence 20 BP; 0 A; 4 C; 4 G; 12 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 15.8;  DB 1;  Length 20;
  Best Local Similarity   89.5%;  Pred. No. 2e+02;
  Matches   17;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       2916 AAGGAACCCATGACAAAGA 2934
              ||| |||||| ||||||||
Db         19 AAGAAACCCAAGACAAAGA 1


RESULT 159
AAS29426/c
ID   AAS29426 standard; DNA; 20 BP.
XX
AC   AAS29426;
XX
DT   21-NOV-2001  (first entry)
XX
DE   Human mdm2 antisense oligonucleotide 31768.
XX
KW   Human; mdm2; hyperproliferative disorder; cancer; psoriasis;
KW   atherosclerosis; tumour; cytostatic; anti psoriatic;
KW   anti arteriosclerotic; vasotropic; antisense; phosphorothioate; ss.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   modified_base    1. .20
FT                    /*tag=  a
FT                    /mod_base= OTHER
FT                    /note= "OTHER= All phosphorothioate linkages,
FT                    additionally bases 1-6 and bases 15-20 are 2'-O-
FT                    methoxyethyl bases, and bases 7-14 are deoxynucleotides"
XX
PN   US2001016575-A1.
XX
PD   23-AUG-2001.
XX
PF   02-JAN-2001; 2001US-00752983.
XX
PR   26-MAR-1998;   98US-00048810.
PR   26-MAR-1999;   99US-00280805.
XX
PA   (MIRA/) MIRAGLIA L J.
PA   (NERO/) NERO P.
PA   (GRAH/) GRAHAM M J.
PA   (MONI/) MONIA B P.
PA   (COWS/) COWSERT L M.
XX
```

PI Miraglia LJ, Nero P, Graham MJ, Monia BP, Cowsert LM;
XX
DR WPI; 2001-535565/59.
XX
PT An antisense compound, useful for treating e.g. cancer, comprises
PT nucleobases targeted a region (e.g. translation termination codon region)
PT of a nucleic acid encoding human mdm2.
XX
PS Example 9; Page 17; 81pp; English.
XX
CC The present invention relates to antisense compounds, 8-30 nucleobases in
CC length targeted to the 5' untranslated region, translation termination
CC codon region, 3' untranslated region, coding region or translation start
CC site of a nucleic acid encoding human mdm2, where the antisense compound
CC modulates the expression of human mdm2. The antisense oligonucleotides of
CC the invention are useful for encoding human mdm2 and for inhibiting the
CC expression of human mdm2. They may be used for treating an animal having
CC a disease or condition associated with amplification of mdm2 gene or
CC overexpression of mdm2 e.g. a hyperproliferative disorder such as cancer
CC (blood, brain, breast, lung, or a soft tissue cancer) and psoriasis,
CC fibrosis, atherosclerosis or restenosis, tumours, colorectal carcinoma
CC and chronic myelogenous leukemia. The antisense compound may be
CC administered with a chemotherapeutic agent to overcome drug resistance.
CC The antisense compound reduces hyperproliferation of human cells. The
CC method, which involves the use of the antisense compound, is also useful
CC for detecting the role of mdm2 expression in various cell functions and
CC physiological processes and useful in both clinical research and
CC diagnostic tools. AAS29242-AAS29507 represent the human mdm2 antisense
CC oligonucleotides of the present invention
XX
SQ Sequence 20 BP; 0 A; 4 C; 4 G; 12 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 2e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 2916 AAGGAACCCATGACAAAGA 2934
||| |||||| ||||||||
Db 19 AAGAAACCCAAGACAAAGA 1

RESULT 160
ABN79736/c
ID ABN79736 standard; DNA; 20 BP.
XX
AC ABN79736;
XX
DT 29-JUL-2002 (first entry)
XX
DE Human Fas target oligonucleotide #51.
XX
KW Human; immunosuppressive; antiinflammatory; hepatotropic; cytostatic;
KW vasotropic; hepatitis; cancer; allograft rejection; ds; Fas.
XX
OS Homo sapiens.
XX
PN US2002004490-A1.
XX
PD 10-JAN-2002.
XX
PF 09-MAR-2001; 2001US-00802669.
XX
PR 12-APR-1999; 99US-00290640.
PR 18-SEP-2000; 2000US-00665615.
XX
PA (DEAN/) DEAN N M.
PA (MARC/) MARCUSSON E G.
PA (WYAT/) WYATT J.
PA (ZHAN/) ZHANG H.
XX
PI Dean NM, Marcusson EG, Wyatt J, Zhang H;
XX
DR WPI; 2002-204886/26.
XX
PT Novel antisense compound targeted to nucleic acid encoding Fas, Fas
PT ligand or Fas associated protein-1 is useful for inhibiting expression of
PT Fas, Fas ligand, or Fap-1 in cells or tissues, and for treating
PT hepatitis.
XX
PS Example 18; Page 24; 84pp; English.
XX
CC This invention relates to an antisense compound encoding Fas, Fas ligand,
CC or Fas associated protein-1 (Fap-1). The inhibition of Fas mediated
CC signalling is thought to be immunosuppressive, antiinflammatory,
CC hepatotropic, cytostatic and vasotropic. Antisense oligonucleotides were
CC designed to target human Fas. Oligonucleotides were synthesised as
CC chimeric oligonucleotides and are useful for treating an animal having an
CC autoimmune or inflammatory disease e.g., hepatitis, cancer, a condition
CC associated with apoptosis, allograft rejection, or ischemia reperfusion
CC injury. Optionally, the above mentioned conditions are prevented by
CC contacting the allograft with the antisense oligonucleotide. The
CC oligonucleotides are used in diagnostics, therapeutics, prophylaxis and
CC as research reagents and in kits. The oligonucleotides are also useful
CC for research purposes. The present nucleotide sequence is related to
CC human Fas
XX
SQ Sequence 20 BP; 9 A; 1 C; 0 G; 10 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 2e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 861 TTAAGAAATAATTTTGATA 879
||||||||||||| || |||
Db 20 TTAAGAAATAATATTTATA 2

RESULT 161
ACD05367
ID ACD05367 standard; DNA; 20 BP.
XX
AC ACD05367;
XX
DT 05-AUG-2003 (first entry)
XX
DE Tumour necrosis factor alpha antisense oligonucleotide #370.
XX
KW Tumour necrosis factor alpha; TNF-alpha; antiinflammatory; antirheumatic;
KW antiarthritic; antidiabetic; dermatological; hepatotropic; antiasthmatic;
KW inflammatory disorder; inflammatory bowel disease; Crohn's disease;
KW colitis; rheumatoid arthritis; diabetes; pancreatitis;
KW multiple sclerosis; atopic dermatitis; asthma; hepatitis;
KW antisense technology; ss.
XX
OS Synthetic.
XX
PN US2003022848-A1.
XX
PD 30-JAN-2003.
XX
PF 02-APR-2001; 2001US-00824322.
XX
PR 05-OCT-1998; 98US-00166186.
PR 18-MAY-1999; 99US-00313932.
XX
PA (BAKE/) BAKER B F.
PA (BENN/) BENNETT C F.
PA (BUTL/) BUTLER M M.
PA (SHAN/) SHANAHAN W R.
XX
PI Baker BF, Bennett CF, Butler MM, Shanahan WR;
XX
DR WPI; 2003-447433/42.
XX
PT Treating inflammatory disorders such as inflammatory bowel disease,
PT Crohn's disease or rheumatoid arthritis, in a subject, by administering

PT oligonucleotide which inhibits expression of human tumor necrosis factor
PT alpha.
XX
PS Example 24; Page 39; 142pp; English.
XX
CC The invention describes a method of treating an inflammatory disorder in
CC an individual, comprising administering to the individual an
CC oligonucleotide upto 30 nucleotides in length complementary to a nucleic
CC acid molecule encoding human tumor necrosis factor (TNF)-alpha. The
CC method is useful for treating an inflammatory disorder such as
CC inflammatory bowel disease, Crohn's disease, colitis or rheumatoid
CC arthritis, in an individual. The method is also useful for treating
CC diabetes, pancreatitis, multiple sclerosis, atopic dermatitis, asthma,
CC and hepatitis in an individual. This sequence represents an antisense
CC oligonucleotide used to modulate expression of tumour necrosis factor
CC alpha (TNF-alpha)
XX
SQ Sequence 20 BP; 7 A; 4 C; 5 G; 4 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 2e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

```
Qy       3414 TTTCAAGGAAGTATGGAAA 3432
              | |||||||||| ||||||
Db          1 TCTCAAGGAAGTCTGGAAA 19
```

RESULT 162
ADD21622/c
ID ADD21622 standard; DNA; 20 BP.
XX
AC ADD21622;
XX
DT 15-JAN-2004 (first entry)
XX
DE Human mdm2 antisense oligonucleotide #185.
XX
KW antisense oligonucleotide; human; mdm2; hyperproliferation;
KW hyperproliferative disorder; cancer; psoriasis; fibrosis;
KW atherosclerosis; restenosis; apoptosis modulation; p21; ss;
KW 2'-methoxyethoxy-residue; phosphorothioate backbone.
XX
OS Homo sapiens.
XX
PN WO2003048315-A2.
XX
PD 12-JUN-2003.
XX
PF 02-DEC-2002; 2002WO-US038281.
XX
PR 04-DEC-2001; 2001US-00005344.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Miraglia LJ, Nero PS, Graham MJ, Monia BP, Koller E, Chiang MY;
PI Manoharan M;
XX
DR WPI; 2003-577263/54.
XX
PT Novel antisense compound targeted to 5' untranslated region, coding
PT region, or intron:exon junction of nucleic acid molecule encoding mdm2,
PT useful for treating e.g. cancer, psoriasis or restenosis by inhibiting
PT mdm2 expression.
XX
PS Example 9; SEQ ID NO 187; 289pp; English.
XX
CC The invention comprises antisense oligonucleotides which are targeted to
CC the human mdm2 gene. The antisense oligonucleotides of the invention are
CC useful for reducing hyperproliferation of human cells. The antisense
CC oligonucleotides are also useful for treating: hyperproliferative
CC disorders (e.g. cancer), psoriasis, fibrosis, atherosclerosis, or
CC restenosis. The antisense oligonucleotides are also useful for modulating
CC apoptosis, and for increasing expression of p21. The present DNA sequence
CC represents a human mdm2 gene antisense oligonucleotide of the invention.
CC The present sequence contains 2'-methoxyethoxy-residues and has a
CC phosphorothioate backbone.
XX
SQ Sequence 20 BP; 0 A; 4 C; 4 G; 12 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 2e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

```
Qy       2916 AAGGAACCCATGACAAAGA 2934
              ||| |||||| ||||||||
Db         19 AAGAAACCCAAGACAAAGA 1
```

RESULT 163
ADE27785/c
ID ADE27785 standard; DNA; 20 BP.
XX
AC ADE27785;
XX
DT 29-JAN-2004 (first entry)
XX
DE Human B7-1 mRNA targeted oligonucleotide SEQ ID 47.
XX
KW ss; human; B7-1; inflammatory skin disorder; antisense; psoriasis;
KW contact dermatitis; atopic dermatitis; seborrheic dermatitis;
KW nummular dermatitis; generalised exfoliative dermatitis; eczema;
KW critical costimulatory molecule.
XX
OS Synthetic.
OS Homo sapiens.
XX
PN US2003176374-A1.
XX
PD 18-SEP-2003.
XX
PF 09-MAY-2001; 2001US-00851871.
XX
PR 31-DEC-1996; 96US-00777266.
PR 04-JUN-1999; 99US-00326186.
PR 25-MAY-2000; 2000WO-US014471.
XX
PA (BENN/) BENNETT C F.
PA (VICK/) VICKERS T A.
PA (KARR/) KARRAS J G.
XX
PI Bennett CF, Vickers TA, Karras JG;
XX
DR WPI; 2003-863863/80.
XX
PT Treating an inflammatory skin disorder such as psoriasis comprises
PT topically applying an antisense compound targeted to the nucleic acid
PT encoding human B7 protein.
XX
PS Example 1; SEQ ID NO 47; 88pp; English.
XX
CC The invention relates to a method of treating an inflammatory skin
CC disorder in an individual by topically applying an antisense compound
CC targeted to a nucleic acid molecule encoding a human B7 protein. The
CC invention is for treating an inflammatory skin disorder in individual.
CC The skin disorder is psoriasis, contact dermatitis, atopic dermatitis,
CC seborrheic dermatitis, nummular dermatitis, generalised exfoliative
CC dermatitis or eczema. The invention effectively modulates critical
CC costimulatory molecules such as the B7 protein. The present sequence
CC represents a human B7-1 targeted oligonucleotide.
XX
SQ Sequence 20 BP; 7 A; 4 C; 8 G; 1 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 2e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

```
Qy       3766 TGGCTGGGATCCCTCCCCT 3784
              ||||||| ||||||| |||
Db         20 TGGCTGGCATCCCTCTCCT 2
```

RESULT 164
ABZ85958
ID ABZ85958 standard; DNA; 20 BP.
XX
AC ABZ85958;
XX
DT 17-OCT-2003 (first entry)
XX
DE Human oligonucleotide sequence.
XX
KW Human; antisense; lung dysfunction; nasal airway dysfunction;
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW lung inflammation; respiratory disease; ds.
XX
OS Homo sapiens.
XX
PN WO200285308-A2.
XX
PD 31-OCT-2002.
XX
PF 23-APR-2002; 2002WO-US013135.
XX
PR 24-APR-2001; 2001US-0286137P.
XX
PA (EPIG-) EPIGENESIS PHARM INC.
XX
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
DR WPI; 2003-229219/22.
XX
PT Pharmaceutical composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisense to specific gene(s) or its
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT ubiquinone.
XX
PS Claim 15; SEQ ID NO 1200; 872pp; English.
XX
CC The invention relates to a novel pharmaceutical composition, which has a
CC first active agent comprising an oligonucleotide antisense to the
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC antiinflammatory steroid and ubiquinone. A composition of the invention
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
CC immunosuppressive, and cytostatic activity. The composition may have a
CC use in antisense gene therapy. The composition is useful for treating or
CC preventing a respiratory, lung or malignant disease or condition, also
CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC receptor, producing bronchodilation, increasing levels of ubiquinone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 20 BP; 5 A; 1 C; 7 G; 7 T; 0 U; 0 Other;

```
  Query Match             0.4%;  Score 15.8;  DB 1;  Length 20;
  Best Local Similarity   89.5%;  Pred. No. 2e+02;
  Matches   17;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;
```

```
Qy       2092 TAGTATCTGTTGTAGCAGT 2110
              |||||||||||| || |||
Db          1 TAGTATCTGTTGGAGAAGT 19
```

RESULT 165
ABZ90805
ID ABZ90805 standard; DNA; 20 BP.
XX
AC ABZ90805;
XX
DT 17-OCT-2003 (first entry)
XX
DE Human oligonucleotide sequence.
XX
KW Human; antisense; lung dysfunction; nasal airway dysfunction;
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW lung inflammation; respiratory disease; ds.
XX
OS Homo sapiens.
XX
PN WO200285308-A2.
XX
PD 31-OCT-2002.
XX
PF 23-APR-2002; 2002WO-US013135.
XX
PR 24-APR-2001; 2001US-0286137P.
XX
PA (EPIG-) EPIGENESIS PHARM INC.
XX
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
DR WPI; 2003-229219/22.
XX
PT Pharmaceutical composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisense to specific gene(s) or its
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT ubiquinone.
XX
PS Disclosure; SEQ ID NO 6047; 872pp; English.
XX
CC The invention relates to a novel pharmaceutical composition, which has a
CC first active agent comprising an oligonucleotide antisense to the
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC antiinflammatory steroid and ubiquinone. A composition of the invention
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
CC immunosuppressive, and cytostatic activity. The composition may have a
CC use in antisense gene therapy. The composition is useful for treating or
CC preventing a respiratory, lung or malignant disease or condition, also
CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC receptor, producing bronchodilation, increasing levels of ubiquinone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 20 BP; 1 A; 6 C; 1 G; 12 T; 0 U; 0 Other;

```
  Query Match             0.4%;  Score 15.8;  DB 1;  Length 20;
  Best Local Similarity   89.5%;  Pred. No. 2e+02;
  Matches   17;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;
```

```
Qy       3081 TGTTCACTTTTTCCTTTTT 3099
              ||||||||||||||| | |
Db          1 TGTTCACTTTTTCCTCTCT 19
```

RESULT 166
ABZ93212
ID ABZ93212 standard; DNA; 20 BP.
XX
AC ABZ93212;
XX
DT 17-OCT-2003 (first entry)
XX
DE Human oligonucleotide sequence.
XX
KW Human; antisense; lung dysfunction; nasal airway dysfunction;
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW lung inflammation; respiratory disease; ds.
XX
OS Homo sapiens.
XX
PN WO200285308-A2.
XX
PD 31-OCT-2002.
XX
PF 23-APR-2002; 2002WO-US013135.
XX
PR 24-APR-2001; 2001US-0286137P.
XX
PA (EPIG-) EPIGENESIS PHARM INC.
XX
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
DR WPI; 2003-229219/22.
XX
PT Pharmaceutical composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisense to specific gene(s) or its
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT ubiquinone.
XX
PS Disclosure; SEQ ID NO 8454; 872pp; English.
XX
CC The invention relates to a novel pharmaceutical composition, which has a
CC first active agent comprising an oligonucleotide antisense to the
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC antiinflammatory steroid and ubiquinone. A composition of the invention
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
CC immunosuppressive, and cytostatic activity. The composition may have a
CC use in antisense gene therapy. The composition is useful for treating or
CC preventing a respiratory, lung or malignant disease or condition, also
CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC receptor, producing bronchodilation, increasing levels of ubiquinone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 20 BP; 12 A; 4 C; 4 G; 0 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 2e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

```
Qy       2974 CAGAGAAAACAGAAAGAGA 2992
              ||||| ||||||||| |||
Db          2 CAGAGCAAACAGAAAAAGA 20
```

RESULT 167
ABZ98920/c
ID ABZ98920 standard; DNA; 20 BP.
XX
AC ABZ98920;
XX
DT 17-OCT-2003 (first entry)
XX
DE Human PDE4A oligonucleotide sequence.
XX
KW Human; antisense; lung dysfunction; nasal airway dysfunction;
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW lung inflammation; respiratory disease; ds.
XX
OS Homo sapiens.
XX
PN WO200285308-A2.
XX
PD 31-OCT-2002.
XX
PF 23-APR-2002; 2002WO-US013135.
XX
PR 24-APR-2001; 2001US-0286137P.
XX
PA (EPIG-) EPIGENESIS PHARM INC.
XX
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
DR WPI; 2003-229219/22.
XX
PT Pharmaceutical composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisense to specific gene(s) or its
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT ubiquinone.
XX
PS Disclosure; SEQ ID NO 14162; 872pp; English.
XX
CC The invention relates to a novel pharmaceutical composition, which has a
CC first active agent comprising an oligonucleotide antisense to the
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC antiinflammatory steroid and ubiquinone. A composition of the invention
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
CC immunosuppressive, and cytostatic activity. The composition may have a
CC use in antisense gene therapy. The composition is useful for treating or
CC preventing a respiratory, lung or malignant disease or condition, also
CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC receptor, producing bronchodilation, increasing levels of ubiquinone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 20 BP; 3 A; 6 C; 8 G; 3 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 2e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

```
Qy       2508 CAGGTGGAGCTGTACCGCC 2526
             | | ||||||||||||||||
Db         20 CCGCTGGAGCTGTACCGCC 2
```

RESULT 168
ABZ97844
ID ABZ97844 standard; DNA; 20 BP.
XX
AC ABZ97844;
XX
DT 17-OCT-2003 (first entry)
XX
DE Human eotaxin oligonucleotide sequence.
XX
KW Human; antisense; lung dysfunction; nasal airway dysfunction;
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW lung inflammation; respiratory disease; ds.
XX
OS Homo sapiens.
XX
PN WO200285308-A2.
XX
PD 31-OCT-2002.
XX
PF 23-APR-2002; 2002WO-US013135.
XX
PR 24-APR-2001; 2001US-0286137P.
XX
PA (EPIG-) EPIGENESIS PHARM INC.
XX
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
DR WPI; 2003-229219/22.
XX
PT Pharmaceutical composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisense to specific gene(s) or its
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT ubiquinone.
XX
PS Disclosure; SEQ ID NO 13086; 872pp; English.
XX
CC The invention relates to a novel pharmaceutical composition, which has a
CC first active agent comprising an oligonucleotide antisense to the
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC antiinflammatory steroid and ubiquinone. A composition of the invention
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
CC immunosuppressive, and cytostatic activity. The composition may have a
CC use in antisense gene therapy. The composition is useful for treating or
CC preventing a respiratory, lung or malignant disease or condition, also
CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC receptor, producing bronchodilation, increasing levels of ubiquinone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 20 BP; 3 A; 7 C; 4 G; 6 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 2e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

```
Qy       2707 GAGGCATTTCTTGCCCAGC 2725
             |||||||||||||  ||| |
Db          1 GAGGCATTTCTTGTCCACC 19
```

RESULT 169
ABZ83897/c
ID ABZ83897 standard; DNA; 20 BP.
XX
AC ABZ83897;
XX
DT 14-MAY-2003 (first entry)
XX
DE Toxicologically relevant rat PCR primer #1056.
XX
KW Toxicologically relevant gene; toxicological response; PCR primer; ss.
XX
OS Rattus sp.
OS Synthetic.
XX
PN WO2003016500-A2.
XX
PD 27-FEB-2003.
XX
PF 16-AUG-2002; 2002WO-US026514.
XX
PR 16-AUG-2001; 2001US-0313080P.
XX
PA (PHAS-) PHASE-1 MOLECULAR TOXICOLOGY INC.
XX
PI Neft RE, Dunn RT, Adkins K, Pickett GG, Kier LD, Schmeiser K;
PI Alen P;
XX
DR WPI; 2003-268322/26.
XX
PT Determining a toxicological response to an agent, useful for screening of
PT drugs, comprises comparing the expression profile of one or more human
PT toxic response genes to a reference gene expression profile indicative of
PT toxicity.
XX
PS Claim 1; Page 322; 455pp; English.
XX
CC The present invention describes a method (M1) for determining a
CC toxicological response to an agent, which comprises comparing the
CC expression profile of one or more human toxic response genes to a
CC reference gene expression profile indicative of toxicity, and so
CC determining the presence of a toxic response to the agent. Also
CC described: (1) an array comprising one or more polynucleotides selected
CC from the genes corresponding to the partial sequences given in ABZ82842
CC to ABZ84764, or their fragments of at least 20 nucleotides, or homologues
CC ; and (2) determining if a gene putatively identified to be a toxic
CC response gene plays a role on toxic response pathways by determining the
CC expression profile of the gene after exposure of cells or a human subject
CC to a known toxic pharmaceutical or industrial agent, comprising: (a)
CC exposing cells to an agent or isolating cells from a human subject who
CC was exposed to an agent; (b) obtaining the test gene expression profile
CC for a putatively identified toxic response gene after exposure to a known
CC toxic pharmaceutical or industrial agent; and (c) comparing the test
CC profile to the expression profile of a gene with a similar function or
CC comparing the test profile to the expression profile of that gene after
CC exposure to other known toxic compounds. The methods are useful for
CC predicting and determining toxicological responses on a cellular, organ
CC or system level. The arrays comprising the human genes are useful for
CC toxicological screening of drugs, pharmaceutical compounds and chemicals
XX
SQ Sequence 20 BP; 3 A; 7 C; 3 G; 7 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 2e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

```
Qy       2653 GATGCAATTGGCAGGAAGC 2671
```

```
                  | ||||||||||| |||||
Db         19 GGTGCAATTGGCAAGAAGC 1


RESULT 170
ACF03393/c
ID   ACF03393 standard; DNA; 20 BP.
XX
AC   ACF03393;
XX
DT   11-SEP-2003  (first entry)
XX
DE   M. gallisepticum mgc3 gene BKR region mutagenic PCR primer SEQ:36.
XX
KW   DNA molecule; prokaryotic cell; eukaryotic cell; virucide; vaccine;
KW   immunostimulant; viral infection; PCR primer; linker; ss.
XX
OS   Mycoplasma gallisepticum.
OS   Synthetic.
XX
PN   EP1275716-A2.
XX
PD   15-JAN-2003.
XX
PF   11-JUL-2002; 2002EP-00254879.
XX
PR   11-JUL-2001; 2001US-00901572.
PR   25-APR-2002; 2002US-00131591.
XX
PA   (JAPG ) ZEON CORP.
XX
PI   Okuda T,  Saito S,  Dorsey KM,  Tsuzaki Y;
XX
DR   WPI; 2003-373746/36.
XX
PT   DNA molecule derived from a prokaryotic cell, useful for producing a
PT   vaccine for treating viral infections comprises at least one modified DNA
PT   regions encoding NXB so that no N-glycosylation occurs during expression.
XX
PS   Example 2; Page 49; 70pp; English.
XX
CC   The present invention describes a DNA molecule derived from a prokaryotic
CC   cell, where at least one of the DNA regions encoding NXB (where N =
CC   asparagine, X = any amino acid other than proline, and B = serine or
CC   threonine) has been modified so that no N-glycosylation occurs during the
CC   expression in a eukaryotic cell. Also described: (1) a fused DNA
CC   molecule, where a DNA encoding a signal sequence has been ligated to the
CC   N-terminal end of the modified DNA molecule as described above so that it
CC   may be expressed as a fusion protein; (2) a recombinant virus integrated
CC   with the DNA molecule or the fused DNA molecule described above; (3)
CC   producing a modified or fusion protein by using the recombinant virus
CC   described above, to express a protein encoded by the modified DNA
CC   molecule or the fused DNA molecule in a eukaryotic cell; and (4) a
CC   vaccine comprising the recombinant virus. The DNA molecule has virucide
CC   and immunostimulant activities. The DNA molecule is useful for producing
CC   a vaccine for treating viral infections. The present sequence is used in
CC   the exemplification of the present invention
XX
SQ   Sequence 20 BP; 9 A; 2 C; 5 G; 4 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 15.8;  DB 1;  Length 20;
  Best Local Similarity   89.5%;  Pred. No. 2e+02;
  Matches   17;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       3702 TGTTTATTTTTTTCAGAAC 3720
              |||||||| | ||||||||
Db         19 TGTTTATTCTCTTCAGAAC 1


RESULT 171
ADJ81464/c
ID   ADJ81464 standard; DNA; 20 BP.
XX
AC   ADJ81464;
XX
DT   06-MAY-2004  (first entry)
XX
DE   Plant retroelement associated sequence #25.
XX
KW   ss; retroelement; detection; retrovirus; plant.
XX
OS   Synthetic.
XX
PN   WO2003050259-A2.
XX
PD   19-JUN-2003.
XX
PF   10-DEC-2002; 2002WO-US039397.
XX
PR   10-DEC-2001; 2001US-0339060P.
XX
PA   (IOWA ) UNIV IOWA STATE RES FOUND INC.
XX
PI   Wright DA,  Voytas DF;
XX
DR   WPI; 2003-532907/50.
XX
PT   New isolated nucleic acids related to retrovirus elements from
PT   Arabidopsis thaliana, useful for detecting infections, such as those
PT   caused by retroviruses.
XX
PS   Disclosure; SEQ ID NO 63; 81pp; English.
XX
CC   The invention relates to novel isolated retroelement comprising at least
CC   90% identity to a 14028 base pair sequence (S1), given in the
CC   specification or to nucleotides 1-1747, 12220-13966, 1-385, 1-40, 1708-
CC   1747, 1893-3575, 3576-4556, 4602-6314, 6315-7625, 8745-10600, 8745-10673
CC   or 8745-10728 of this sequence, or its complement. The nucleic acid may
CC   be useful in detecting infections, such as those caused by retroviruses.
CC   This sequence corresponds to a retroelement associated sequence.
XX
SQ   Sequence 20 BP; 5 A; 5 C; 4 G; 6 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 15.8;  DB 1;  Length 20;
  Best Local Similarity   89.5%;  Pred. No. 2e+02;
  Matches   17;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       2465 CTTCATTGTCCTGCAGAAG 2483
                | | ||||||||||||||||
Db         20 CATGATTGTCCTGCAGAAG 2


RESULT 172
ABD27035
ID   ABD27035 standard; DNA; 20 BP.
XX
AC   ABD27035;
XX
DT   29-JUL-2004  (first entry)
XX
DE   H93087-derived oligonucleotide SEQ ID 6047.
XX
KW   Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
KW   respiratory tract inflammation; adenosine sensitivity; lung; cancer;
KW   surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;
KW   analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
KW   beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
KW   respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
KW   emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
KW   pulmonary transplantation rejection; ss; primer.
XX
OS   Homo sapiens.
XX
PN   WO200285309-A2.
XX
PD   31-OCT-2002.
```

XX
PF 23-APR-2002; 2002WO-US013143.
XX
PR 24-APR-2001; 2001US-0286036P.
XX
PA (EPIG-) EPIGENESIS PHARM INC.
XX
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
DR WPI; 2003-093058/08.
XX
PT Pharmaceutical composition for treating asthma, has antisense
PT oligonucleotide containing less percentage of adenosine, targeted to
PT nucleic acids associated with lung airway or lung dysfunction, and
PT bronchodilating agent.
XX
PS Claim 15; SEQ ID NO 6047; 763pp; English.
XX
CC This invention describes a novel composition (a) a first active agent,
CC comprising oligonucleotides, effective for alleviating
CC bronchoconstriction, respiratory tract inflammation, allergies and
CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
CC surfactant depletion or hyposecretion, when administered to a mammal. The
CC oligonucleotides are derived from a gene encoding or regulating
CC expression of a target polypeptide associated with lung airway or lung
CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
CC The invention also describes a kit, that comprises: (a) a delivery
CC device, in separate containers, (b) the oligonucleotides, (c)
CC instructions for adding a carrier and for use of the kit. The composition
CC of the invention has antiallergic, antiinflammatory, antiasthmatic,
CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
CC beta-adrenergic agonist. The composition is useful for preventing or
CC treating a respiratory, lung or malignant disease. The administered
CC composition comprises oligo and is administered to reduce the production
CC or availability, or to increase the degradation of the target mRNA or to
CC reduce the amount of target polypeptide present in the lungs. The
CC pulmonary obstruction, and/or bronchoconstriction and/or lung
CC inflammation, allergies and/or surfactant hypoproduction are associated
CC with a disease or condition such as pulmonary vasoconstriction,
CC inflammation, allergies, asthma, impeded respiration, respiratory
CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
CC transplantation rejection, pulmonary infections, bronchitis or cancer.
CC The reduced adenosine content of the anti-sense oligos corresponding to
CC thymidines present in the target RNA serves to prevent the breakdown of
CC the oligonucleotides into products that free adenosine into the system
CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
CC prevent any unwanted effects due to it
XX
SQ Sequence 20 BP; 1 A; 6 C; 1 G; 12 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 2e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 3081 TGTTCACTTTTTCCTTTTT 3099
||||||||||||||| | |
Db 1 TGTTCACTTTTTCCTCTCT 19

RESULT 173
ABD31951/c
ID ABD31951 standard; DNA; 20 BP.
XX
AC ABD31951;
XX
DT 29-JUL-2004 (first entry)
XX
DE Human PDE4A-derived oligonucleotide SEQ ID 14162.
XX
KW Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
KW surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;
KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
KW pulmonary transplantation rejection; ss; primer.
XX
OS Homo sapiens.
XX
PN WO200285309-A2.
XX
PD 31-OCT-2002.
XX
PF 23-APR-2002; 2002WO-US013143.
XX
PR 24-APR-2001; 2001US-0286036P.
XX
PA (EPIG-) EPIGENESIS PHARM INC.
XX
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
DR WPI; 2003-093058/08.
XX
PT Pharmaceutical composition for treating asthma, has antisense
PT oligonucleotide containing less percentage of adenosine, targeted to
PT nucleic acids associated with lung airway or lung dysfunction, and
PT bronchodilating agent.
XX
PS Claim 15; SEQ ID NO 14162; 763pp; English.
XX
CC This invention describes a novel composition (a) a first active agent,
CC comprising oligonucleotides, effective for alleviating
CC bronchoconstriction, respiratory tract inflammation, allergies and
CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
CC surfactant depletion or hyposecretion, when administered to a mammal. The
CC oligonucleotides are derived from a gene encoding or regulating
CC expression of a target polypeptide associated with lung airway or lung
CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
CC The invention also describes a kit, that comprises: (a) a delivery
CC device, in separate containers, (b) the oligonucleotides, (c)
CC instructions for adding a carrier and for use of the kit. The composition
CC of the invention has antiallergic, antiinflammatory, antiasthmatic,
CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
CC beta-adrenergic agonist. The composition is useful for preventing or
CC treating a respiratory, lung or malignant disease. The administered
CC composition comprises oligo and is administered to reduce the production
CC or availability, or to increase the degradation of the target mRNA or to
CC reduce the amount of target polypeptide present in the lungs. The
CC pulmonary obstruction, and/or bronchoconstriction and/or lung
CC inflammation, allergies and/or surfactant hypoproduction are associated
CC with a disease or condition such as pulmonary vasoconstriction,
CC inflammation, allergies, asthma, impeded respiration, respiratory
CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
CC transplantation rejection, pulmonary infections, bronchitis or cancer.
CC The reduced adenosine content of the anti-sense oligos corresponding to
CC thymidines present in the target RNA serves to prevent the breakdown of
CC the oligonucleotides into products that free adenosine into the system
CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
CC prevent any unwanted effects due to it
XX
SQ Sequence 20 BP; 3 A; 6 C; 8 G; 3 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 2e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 2508 CAGGTGGAGCTGTACCGCC 2526
| | ||||||||||||||||
Db 20 CCGCTGGAGCTGTACCGCC 2

RESULT 174
ABD22188
ID ABD22188 standard; DNA; 20 BP.
XX
AC ABD22188;
XX
DT 29-JUL-2004 (first entry)
XX
DE Human stanniocalcin-derived oligo SEQ ID 1200.
XX
KW Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
KW surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;
KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
KW pulmonary transplantation rejection; ss; primer.
XX
OS Homo sapiens.
XX
PN WO200285309-A2.
XX
PD 31-OCT-2002.
XX
PF 23-APR-2002; 2002WO-US013143.
XX
PR 24-APR-2001; 2001US-0286036P.
XX
PA (EPIG-) EPIGENESIS PHARM INC.
XX
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
DR WPI; 2003-093058/08.
XX
PT Pharmaceutical composition for treating asthma, has antisense
PT oligonucleotide containing less percentage of adenosine, targeted to
PT nucleic acids associated with lung airway or lung dysfunction, and
PT bronchodilating agent.
XX
PS Claim 15; SEQ ID NO 1200; 763pp; English.
XX
CC This invention describes a novel composition (a) a first active agent,
CC comprising oligonucleotides, effective for alleviating
CC bronchoconstriction, respiratory tract inflammation, allergies and
CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
CC surfactant depletion or hyposecretion, when administered to a mammal. The
CC oligonucleotides are derived from a gene encoding or regulating
CC expression of a target polypeptide associated with lung airway or lung
CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
CC The invention also describes a kit, that comprises: (a) a delivery
CC device, in separate containers, (b) the oligonucleotides, (c)
CC instructions for adding a carrier and for use of the kit. The composition
CC of the invention has antiallergic, antiinflammatory, antiasthmatic,
CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
CC beta-adrenergic agonist. The composition is useful for preventing or
CC treating a respiratory, lung or malignant disease. The administered
CC composition comprises oligo and is administered to reduce the production
CC or availability, or to increase the degradation of the target mRNA or to
CC reduce the amount of target polypeptide present in the lungs. The
CC pulmonary obstruction, and/or bronchoconstriction and/or lung
CC inflammation, allergies and/or surfactant hypoproduction are associated
CC with a disease or condition such as pulmonary vasoconstriction,
CC inflammation, allergies, asthma, impeded respiration, respiratory
CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
CC transplantation rejection, pulmonary infections, bronchitis or cancer.
CC The reduced adenosine content of the anti-sense oligos corresponding to
CC thymidines present in the target RNA serves to prevent the breakdown of
CC the oligonucleotides into products that free adenosine into the system
CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
CC prevent any unwanted effects due to it
XX
SQ Sequence 20 BP; 5 A; 1 C; 7 G; 7 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 2e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 2092 TAGTATCTGTTGTAGCAGT 2110
||||||||||||| || |||
Db 1 TAGTATCTGTTGGAGAAGT 19

RESULT 175
ABD30875
ID ABD30875 standard; DNA; 20 BP.
XX
AC ABD30875;
XX
DT 29-JUL-2004 (first entry)
XX
DE Human eotaxin-derived oligonucleotide SEQ ID 13086.
XX
KW Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
KW surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;
KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
KW pulmonary transplantation rejection; ss; primer.
XX
OS Homo sapiens.
XX
PN WO200285309-A2.
XX
PD 31-OCT-2002.
XX
PF 23-APR-2002; 2002WO-US013143.
XX
PR 24-APR-2001; 2001US-0286036P.
XX
PA (EPIG-) EPIGENESIS PHARM INC.
XX
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
DR WPI; 2003-093058/08.
XX
PT Pharmaceutical composition for treating asthma, has antisense
PT oligonucleotide containing less percentage of adenosine, targeted to
PT nucleic acids associated with lung airway or lung dysfunction, and
PT bronchodilating agent.
XX
PS Claim 15; SEQ ID NO 13086; 763pp; English.
XX
CC This invention describes a novel composition (a) a first active agent,
CC comprising oligonucleotides, effective for alleviating
CC bronchoconstriction, respiratory tract inflammation, allergies and
CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
CC surfactant depletion or hyposecretion, when administered to a mammal. The
CC oligonucleotides are derived from a gene encoding or regulating
CC expression of a target polypeptide associated with lung airway or lung
CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
CC The invention also describes a kit, that comprises: (a) a delivery
CC device, in separate containers, (b) the oligonucleotides, (c)
CC instructions for adding a carrier and for use of the kit. The composition
CC of the invention has antiallergic, antiinflammatory, antiasthmatic,
CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
CC beta-adrenergic agonist. The composition is useful for preventing or
CC treating a respiratory, lung or malignant disease. The administered
CC composition comprises oligo and is administered to reduce the production
CC or availability, or to increase the degradation of the target mRNA or to
CC reduce the amount of target polypeptide present in the lungs. The

CC pulmonary obstruction, and/or bronchoconstriction and/or lung
CC inflammation, allergies and/or surfactant hypoproduction are associated
CC with a disease or condition such as pulmonary vasoconstriction,
CC inflammation, allergies, asthma, impeded respiration, respiratory
CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
CC transplantation rejection, pulmonary infections, bronchitis or cancer.
CC The reduced adenosine content of the anti-sense oligos corresponding to
CC thymidines present in the target RNA serves to prevent the breakdown of
CC the oligonucleotides into products that free adenosine into the system
CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
CC prevent any unwanted effects due to it
XX
SQ Sequence 20 BP; 3 A; 7 C; 4 G; 6 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 2e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

```
Qy       2707 GAGGCATTTCTTGCCCAGC 2725
              ||||||||||||| ||| |
Db          1 GAGGCATTTCTTGTCCACC 19
```

RESULT 176
ABD29442
ID ABD29442 standard; DNA; 20 BP.
XX
AC ABD29442;
XX
DT 29-JUL-2004 (first entry)
XX
DE H87536-derived oligonucleotide SEQ ID 8454.
XX
KW Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
KW surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;
KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
KW pulmonary transplantation rejection; ss; primer.
XX
OS Homo sapiens.
XX
PN WO200285309-A2.
XX
PD 31-OCT-2002.
XX
PF 23-APR-2002; 2002WO-US013143.
XX
PR 24-APR-2001; 2001US-0286036P.
XX
PA (EPIG-) EPIGENESIS PHARM INC.
XX
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
DR WPI; 2003-093058/08.
XX
PT Pharmaceutical composition for treating asthma, has antisense
PT oligonucleotide containing less percentage of adenosine, targeted to
PT nucleic acids associated with lung airway or lung dysfunction, and
PT bronchodilating agent.
XX
PS Claim 15; SEQ ID NO 8454; 763pp; English.
XX
CC This invention describes a novel composition (a) a first active agent,
CC comprising oligonucleotides, effective for alleviating
CC bronchoconstriction, respiratory tract inflammation, allergies and
CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
CC surfactant depletion or hyposecretion, when administered to a mammal. The
CC oligonucleotides are derived from a gene encoding or regulating
CC expression of a target polypeptide associated with lung airway or lung
CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
CC The invention also describes a kit, that comprises: (a) a delivery
CC device, in separate containers, (b) the oligonucleotides, (c)
CC instructions for adding a carrier and for use of the kit. The composition
CC of the invention has antiallergic, antiinflammatory, antiasthmatic,
CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
CC beta-adrenergic agonist. The composition is useful for preventing or
CC treating a respiratory, lung or malignant disease. The administered
CC composition comprises oligo and is administered to reduce the production
CC or availability, or to increase the degradation of the target mRNA or to
CC reduce the amount of target polypeptide present in the lungs. The
CC pulmonary obstruction, and/or bronchoconstriction and/or lung
CC inflammation, allergies and/or surfactant hypoproduction are associated
CC with a disease or condition such as pulmonary vasoconstriction,
CC inflammation, allergies, asthma, impeded respiration, respiratory
CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
CC transplantation rejection, pulmonary infections, bronchitis or cancer.
CC The reduced adenosine content of the anti-sense oligos corresponding to
CC thymidines present in the target RNA serves to prevent the breakdown of
CC the oligonucleotides into products that free adenosine into the system
CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
CC prevent any unwanted effects due to it
XX
SQ Sequence 20 BP; 12 A; 4 C; 4 G; 0 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 2e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

```
Qy       2974 CAGAGAAAACAGAAAGAGA 2992
              ||||| ||||||||| |||
Db          2 CAGAGCAAACAGAAAAAGA 20
```

RESULT 177
ADH70402
ID ADH70402 standard; DNA; 20 BP.
XX
AC ADH70402;
XX
DT 25-MAR-2004 (first entry)
XX
DE Human Vbeta gene repeat sequence #192.
XX
KW human; T-cell associated disease; Vbeta; autoimmune disease;
KW degenerative nervous system disease; graft versus host disease;
KW hypersensitivity disease; infectious disease; neoplastic disease;
KW Addison's disease; atrophic gastritis;
KW degenerative nervous system disease; multiple sclerosis;
KW Alzheimer's disease; hypersensitivity disease; type I hypersensitivity;
KW allergy; type II hypersensitivity; Goodpasture's syndrome;
KW type IV hypersensitivity; leprosy; infectious disease; viral infection;
KW HIV; fungal infection; Candida; parasitic infection; schistosome;
KW filaria; bacterial infection; Mycobacterium; neoplastic disease;
KW lymphoproliferative disease; leukaemia; lymphoma; cancer; brain cancer;
KW breast cancer; ds.
XX
OS Homo sapiens.
XX
PN US2002150891-A1.
XX
PD 17-OCT-2002.
XX
PF 05-MAR-1999; 99US-00263959.
XX
PR 19-SEP-1994; 94US-00309335.
PR 19-SEP-1995; 95US-00531241.
XX
PA (HOOD/) HOOD L E.
PA (ROWE/) ROWEN L.
XX

```
PI   Hood LE,  Rowen L;
XX
DR   WPI; 2004-059052/06.
XX
PT   Kit for diagnozing and treating T-cell associated diseases e.g.
PT   autoimmune, degenerative nervous system and infectious disease, comprises
PT   nucleic acid primers specifically priming and allowing amplification of a
PT   Vbeta gene.
XX
PS   Disclosure; SEQ ID NO 596; 164pp; English.
XX
CC   The invention relates to a kit for diagnosing and treating T-cell
CC   associated diseases which comprises a panel of nucleic acid primers
CC   specifically priming and allowing amplification of each Vbeta gene,
CC   VbetaRNA or cDNA. The kit is useful for diagnosing organ transplant
CC   rejection and diagnosing and treating T-cell associated diseases
CC   including autoimmune diseases, degenerative nervous system diseases,
CC   graft versus host disease, hypersensitivity diseases, infectious diseases
CC   and neoplastic diseases. Autoimmune diseases include Addison's disease,
CC   atrophic gastritis. Degenerative nervous system diseases include multiple
CC   sclerosis and Alzheimer's disease. Hypersensitivity diseases include Type
CC   I hypersensitivities such as contact with allergens that lead to
CC   allergies, Type II hypersensitivities such as those present in
CC   Goodpasture's syndrome and Type IV hypersensitivities such as those
CC   manifested in leprosy. Infectious diseases include viral infections
CC   caused by viruses such as HIV, fungal infections such as those caused by
CC   the yeast genus Candida, parasitic infections such as those caused by
CC   schistosomes, filaria and bacterial infections such as those caused by
CC   Mycobacterium. Neoplastic diseases include lymphoproliferative diseases
CC   such as leukaemias, lymphomas and cancers such as cancer of the brain,
CC   breast. The present sequence represents a Vbeta gene repeat sequence.
XX
SQ   Sequence 20 BP; 8 A; 0 C; 0 G; 12 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 15.8;  DB 1;  Length 20;
  Best Local Similarity   89.5%;  Pred. No. 2e+02;
  Matches   17;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       3300 ATATATTTTTATTTTTATA 3318
              |||||| ||||||| ||||
Db          2 ATATATATTTATTTATATA 20


RESULT 178
ADH67733/c
ID   ADH67733 standard; DNA; 20 BP.
XX
AC   ADH67733;
XX
DT   25-MAR-2004  (first entry)
XX
DE   Human glucocorticoid receptor-specific antisense oligonucleotide #4567.
XX
KW   antisense oligonucleotide; glucocorticoid receptor; infection;
KW   inflammation; tumour formation; diabetes; obesity;
KW   cardiovascular disorder; hyperlipidaemia; Cushing's syndrome; human; ss;
KW   phosphorothioate backbone; 2'-methoxyethyl; 2'-MOE.
XX
OS   Homo sapiens.
XX
PN   WO2003099215-A2.
XX
PD   04-DEC-2003.
XX
PF   20-MAY-2003; 2003WO-US016084.
XX
PR   20-MAY-2002; 2002US-0381857P.
XX
PA   (PHAA ) PHARMACIA CORP.
XX
PI   Crosby SD,  Nalseth AE;
XX
DR   WPI; 2004-035034/03.
XX
PT   New antisense compound targeted to a nucleic acid molecule encoding
PT   mammalian glucocorticoid receptor, useful for treating diabetes, obesity,
PT   cardiovascular disorder, hyperlipidemia or Cushing's syndrome.
XX
PS   Claim 4; SEQ ID NO 4567; 985pp; English.
XX
CC   The invention comprises an antisense oligonucleotides that are targeted
CC   to nucleic acids encoding a mammalian glucocorticoid receptor. The
CC   antisense oligonucleotides of the invention are useful for preventing or
CC   delaying infection, inflammation or tumour formation. The antisense
CC   oligonucleotides are also useful for treating diabetes, obesity,
CC   cardiovascular disorders, hyperlipidaemia or Cushing's syndrome. The
CC   present DNA sequence represents an antisense oligonucleotide that targets
CC   the human glucocorticoid receptor gene. NOTE: The present sequence
CC   contains 2'-methoxyethyl (2'-MOE) wings and a phosphorothioate backbone.
XX
SQ   Sequence 20 BP; 12 A; 1 C; 0 G; 7 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 15.8;  DB 1;  Length 20;
  Best Local Similarity   89.5%;  Pred. No. 2e+02;
  Matches   17;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       3298 TGATATATTTTTATTTTTA 3316
              | |||||||||||| ||||
Db         20 TAATATATTTTTATATTTA 2


RESULT 179
ADH65935
ID   ADH65935 standard; DNA; 20 BP.
XX
AC   ADH65935;
XX
DT   25-MAR-2004  (first entry)
XX
DE   Human glucocorticoid receptor-specific antisense oligonucleotide #2769.
XX
KW   antisense oligonucleotide; glucocorticoid receptor; infection;
KW   inflammation; tumour formation; diabetes; obesity;
KW   cardiovascular disorder; hyperlipidaemia; Cushing's syndrome; human; ss;
KW   phosphorothioate backbone; 2'-methoxyethyl; 2'-MOE.
XX
OS   Homo sapiens.
XX
PN   WO2003099215-A2.
XX
PD   04-DEC-2003.
XX
PF   20-MAY-2003; 2003WO-US016084.
XX
PR   20-MAY-2002; 2002US-0381857P.
XX
PA   (PHAA ) PHARMACIA CORP.
XX
PI   Crosby SD,  Nalseth AE;
XX
DR   WPI; 2004-035034/03.
XX
PT   New antisense compound targeted to a nucleic acid molecule encoding
PT   mammalian glucocorticoid receptor, useful for treating diabetes, obesity,
PT   cardiovascular disorder, hyperlipidemia or Cushing's syndrome.
XX
PS   Claim 4; SEQ ID NO 2769; 985pp; English.
XX
CC   The invention comprises an antisense oligonucleotides that are targeted
CC   to nucleic acids encoding a mammalian glucocorticoid receptor. The
CC   antisense oligonucleotides of the invention are useful for preventing or
CC   delaying infection, inflammation or tumour formation. The antisense
CC   oligonucleotides are also useful for treating diabetes, obesity,
CC   cardiovascular disorders, hyperlipidaemia or Cushing's syndrome. The
CC   present DNA sequence represents an antisense oligonucleotide that targets
CC   the human glucocorticoid receptor gene. NOTE: The present sequence
```

```
CC   contains 2'-methoxyethyl (2'-MOE) wings and a phosphorothioate backbone.
XX
SQ   Sequence 20 BP; 5 A; 3 C; 5 G; 7 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 15.8;  DB 1;  Length 20;
  Best Local Similarity   89.5%;  Pred. No. 2e+02;
  Matches   17;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1325 CAAAGGTTGCTGTTCTCAA 1343
              |||| |||||||||| ||
Db          1 CAAATGTTGCTGTTCTGAA 19


RESULT 180
ADH67703/c
ID   ADH67703 standard; DNA; 20 BP.
XX
AC   ADH67703;
XX
DT   25-MAR-2004  (first entry)
XX
DE   Human glucocorticoid receptor-specific antisense oligonucleotide #4537.
XX
KW   antisense oligonucleotide; glucocorticoid receptor; infection;
KW   inflammation; tumour formation; diabetes; obesity;
KW   cardiovascular disorder; hyperlipidaemia; Cushing's syndrome; human; ss;
KW   phosphorothioate backbone; 2'-methoxyethyl; 2'-MOE.
XX
OS   Homo sapiens.
XX
PN   WO2003099215-A2.
XX
PD   04-DEC-2003.
XX
PF   20-MAY-2003; 2003WO-US016084.
XX
PR   20-MAY-2002; 2002US-0381857P.
XX
PA   (PHAA ) PHARMACIA CORP.
XX
PI   Crosby SD,  Nalseth AE;
XX
DR   WPI; 2004-035034/03.
XX
PT   New antisense compound targeted to a nucleic acid molecule encoding
PT   mammalian glucocorticoid receptor, useful for treating diabetes, obesity,
PT   cardiovascular disorder, hyperlipidemia or Cushing's syndrome.
XX
PS   Claim 4; SEQ ID NO 4537; 985pp; English.
XX
CC   The invention comprises an antisense oligonucleotides that are targeted
CC   to nucleic acids encoding a mammalian glucocorticoid receptor. The
CC   antisense oligonucleotides of the invention are useful for preventing or
CC   delaying infection, inflammation or tumour formation. The antisense
CC   oligonucleotides are also useful for treating diabetes, obesity,
CC   cardiovascular disorders, hyperlipidaemia or Cushing's syndrome. The
CC   present DNA sequence represents an antisense oligonucleotide that targets
CC   the human glucocorticoid receptor gene. NOTE: The present sequence
CC   contains 2'-methoxyethyl (2'-MOE) wings and a phosphorothioate backbone.
XX
SQ   Sequence 20 BP; 13 A; 0 C; 1 G; 6 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 15.8;  DB 1;  Length 20;
  Best Local Similarity   89.5%;  Pred. No. 2e+02;
  Matches   17;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       3297 CTGATATATTTTTATTTTT 3315
              || |||||||||||| |||
Db         19 CTAATATATTTTTATATTT 1


RESULT 181
ADI79725/c
ID   ADI79725 standard; DNA; 20 BP.
XX
AC   ADI79725;
XX
DT   22-APR-2004  (first entry)
XX
DE   Human HMG-CoA reductase antisense oligonucleotide, SEQ ID No 248.
XX
KW   HMG-CoA reductase; 3-hydroxy-3-methylglutaryl-Coenzyme A;
KW   HMG-CoA reductase; cardiant; antiarteriosclerotic; antilipaemic;
KW   antisense gene therapy; cardiovascular disorder; cholesterol metabolism;
KW   human; ss.
XX
OS   Homo sapiens.
XX
PN   US2004006031-A1.
XX
PD   08-JAN-2004.
XX
PF   02-JUL-2002; 2002US-00190366.
XX
PR   02-JUL-2002; 2002US-00190366.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Dean NM,  Freier SM,  Dobie KW;
XX
DR   WPI; 2004-081743/08.
XX
PT   New compounds, particularly antisense oligonucleotides targeted to a
PT   nucleic acid encoding HMG-CoA reductase, useful for treating
PT   atherosclerosis, or a disease involving cholesterol metabolism or
PT   angiogenesis.
XX
PS   Example 16; SEQ ID NO 248; 110pp; English.
XX
CC   The invention relates to novel compounds of 8-80 nucleobases in length
CC   targeted to, and which specifically hybridises with, a nucleic acid
CC   molecule encoding 3-hydroxy-3-methylglutaryl-Coenzyme A (HMG-CoA)
CC   reductase, and inhibits the expression of HMG-CoA reductase. The novel
CC   compounds have cardiant, antiarteriosclerotic, and antilipaemic
CC   activities. The compound can be used to treat disorders by antisense gene
CC   therapy. The compounds, compositions and methods are useful for treating
CC   a disease or condition associated with HMG-CoA reductase, such as a
CC   cardiovascular disorder e.g. atherosclerosis, or a disease or condition
CC   involving cholesterol metabolism. They are also useful in research and
CC   diagnostics for modulating the expression of HMG-CoA reductase. This
CC   polynucleotide sequence represents an antisense oligonucleotide of the
CC   invention.
XX
SQ   Sequence 20 BP; 4 A; 4 C; 9 G; 3 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 15.8;  DB 1;  Length 20;
  Best Local Similarity   89.5%;  Pred. No. 2e+02;
  Matches   17;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy         73 CTCTGATCCCAGCCATGGC 91
              || || |||||||||||||
Db         19 CTATGCTCCCAGCCATGGC 1


RESULT 182
ADI79528
ID   ADI79528 standard; DNA; 20 BP.
XX
AC   ADI79528;
XX
DT   22-APR-2004  (first entry)
XX
DE   Human HMG-CoA reductase antisense oligonucleotide, SEQ ID No 51.
XX
KW   HMG-CoA reductase; 3-hydroxy-3-methylglutaryl-Coenzyme A;
KW   HMG-CoA reductase; cardiant; antiarteriosclerotic; antilipaemic;
```

KW antisense gene therapy; cardiovascular disorder; cholesterol metabolism;
KW human; ss.
XX
OS Homo sapiens.
XX
PN US2004006031-A1.
XX
PD 08-JAN-2004.
XX
PF 02-JUL-2002; 2002US-00190366.
XX
PR 02-JUL-2002; 2002US-00190366.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Dean NM, Freier SM, Dobie KW;
XX
DR WPI; 2004-081743/08.
XX
PT New compounds, particularly antisense oligonucleotides targeted to a
PT nucleic acid encoding HMG-CoA reductase, useful for treating
PT atherosclerosis, or a disease involving cholesterol metabolism or
PT angiogenesis.
XX
PS Example 15; SEQ ID NO 51; 110pp; English.
XX
CC The invention relates to novel compounds of 8-80 nucleobases in length
CC targeted to, and which specifically hybridises with, a nucleic acid
CC molecule encoding 3-hydroxy-3-methylglutaryl-Coenzyme A (HMG-CoA)
CC reductase, and inhibits the expression of HMG-CoA reductase. The novel
CC compounds have cardiant, antiarteriosclerotic, and antilipaemic
CC activities. The compound can be used to treat disorders by antisense gene
CC therapy. The compounds, compositions and methods are useful for treating
CC a disease or condition associated with HMG-CoA reductase, such as a
CC cardiovascular disorder e.g. atherosclerosis, or a disease or condition
CC involving cholesterol metabolism. They are also useful in research and
CC diagnostics for modulating the expression of HMG-CoA reductase. This
CC polynucleotide sequence represents an antisense oligonucleotide of the
CC invention.
XX
SQ Sequence 20 BP; 3 A; 9 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 2e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 73 CTCTGATCCCAGCCATGGC 91
|| || ||||||||||||
Db 2 CTATGCTCCCAGCCATGGC 20

RESULT 183
ADJ60803/c
ID ADJ60803 standard; DNA; 20 BP.
XX
AC ADJ60803;
XX
DT 06-MAY-2004 (first entry)
XX
DE Oligonucleotide associated to PDE4A #86.
XX
KW interleukin; IL-4 receptor; IL-5 receptor; lung disease;
KW airway inflammation; allergy; asthma; impeded respiration;
KW cystic fibrosis; acute respiratory distress syndrome;
KW pulmonary hypertension; lung inflammation; bronchitis; oligonucleotide;
KW ss.
XX
OS Homo sapiens.
XX
PN WO2004011613-A2.
XX
PD 05-FEB-2004.
XX
PF 25-JUL-2003; 2003WO-US023509.
XX
PR 29-JUL-2002; 2002US-0399076P.
XX
PA (EPIG-) EPIGENESIS PHARM INC.
XX
PI Nyce JW, Tang L, Sandrasagra A, Aguilar D, Miller S;
PI Shahabuddin S, Lu H, Cong H;
XX
DR WPI; 2004-203534/19.
XX
PT Novel single or multiple target oligonucleotide anti-sense to e.g.
PT initiation codons and introns of respiratory disease-relevant genes e.g.,
PT CCR1, RANTES, MCP4, useful for prophylaxis or treating respiratory
PT disease e.g., asthma.
XX
PS Claim 2; SEQ ID NO 1659; 85pp; English.
XX
CC The present invention relates to an oligonucleotide anti-sense to e.g.,
CC initiation codon, coding region with 2-10 nucleotides of 5'-end and 3'-
CC end of nucleic acid target comprising gene(s) chosen from e.g.
CC interleukin (IL)-4 receptor, IL-5 receptor or salts of the
CC oligonucleotide and optionally surfactant operatively linked to the
CC oligonucleotide. The method is useful for preventing or treating a
CC respiratory or lung disease, which involves administering to the airways
CC of a subject an effective amount of an inhibitor. The oligonucleotide is
CC useful for production of a medicament for the prevention and/or treatment
CC of a respiratory or lung disease. The respiratory or lung disease is
CC chosen from airway inflammation, allergy(ies), asthma, impeded
CC respiration, cystic fibrosis (CF), chronic obstructive pulmonary diseases
CC (COPD), allergic rhinitis (AR), acute respiratory distress syndrome
CC (ARDS), pulmonary hypertension, lung inflammation, bronchitis, airway
CC obstruction. The present sequence represents an oligonucleotide of the
CC invention.
XX
SQ Sequence 20 BP; 3 A; 6 C; 8 G; 3 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 2e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 2508 CAGGTGGAGCTGTACCGCC 2526
| | ||||||||||||||||
Db 20 CCGCTGGAGCTGTACCGCC 2

RESULT 184
ADJ59719
ID ADJ59719 standard; DNA; 20 BP.
XX
AC ADJ59719;
XX
DT 06-MAY-2004 (first entry)
XX
DE Oligonucleotide associated to Eotaxin U46572 #5.
XX
KW interleukin; IL-4 receptor; IL-5 receptor; lung disease;
KW airway inflammation; allergy; asthma; impeded respiration;
KW cystic fibrosis; acute respiratory distress syndrome;
KW pulmonary hypertension; lung inflammation; bronchitis; oligonucleotide;
KW ss.
XX
OS Homo sapiens.
XX
PN WO2004011613-A2.
XX
PD 05-FEB-2004.
XX
PF 25-JUL-2003; 2003WO-US023509.
XX
PR 29-JUL-2002; 2002US-0399076P.
XX
PA (EPIG-) EPIGENESIS PHARM INC.

XX
PI Nyce JW, Tang L, Sandrasagra A, Aguilar D, Miller S;
PI Shahabuddin S, Lu H, Cong H;
XX
DR WPI; 2004-203534/19.
XX
PT Novel single or multiple target oligonucleotide anti-sense to e.g.
PT initiation codons and introns of respiratory disease-relevant genes e.g.,
PT CCR1, RANTES, MCP4, useful for prophylaxis or treating respiratory
PT disease e.g., asthma.
XX
PS Claim 2; SEQ ID NO 575; 85pp; English.
XX
CC The present invention relates to an oligonucleotide anti-sense to e.g.,
CC initiation codon, coding region with 2-10 nucleotides of 5'-end and 3'-
CC end of nucleic acid target comprising gene(s) chosen from e.g.
CC interleukin (IL)-4 receptor, IL-5 receptor or salts of the
CC oligonucleotide and optionally surfactant operatively linked to the
CC oligonucleotide. The method is useful for preventing or treating a
CC respiratory or lung disease, which involves administering to the airways
CC of a subject an effective amount of an inhibitor. The oligonucleotide is
CC useful for production of a medicament for the prevention and/or treatment
CC of a respiratory or lung disease. The respiratory or lung disease is
CC chosen from airway inflammation, allergy(ies), asthma, impeded
CC respiration, cystic fibrosis (CF), chronic obstructive pulmonary diseases
CC (COPD), allergic rhinitis (AR), acute respiratory distress syndrome
CC (ARDS), pulmonary hypertension, lung inflammation, bronchitis, airway
CC obstruction. The present sequence represents an oligonucleotide of the
CC invention.
XX
SQ Sequence 20 BP; 3 A; 7 C; 4 G; 6 T; 0 U; 0 Other;

```
  Query Match             0.4%;  Score 15.8;  DB 1;  Length 20;
  Best Local Similarity   89.5%;  Pred. No. 2e+02;
  Matches   17;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       2707 GAGGCATTTCTTGCCCAGC 2725
              ||||||||||||| ||| |
Db          1 GAGGCATTTCTTGTCCACC 19
```

RESULT 185
ADJ54227/c
ID ADJ54227 standard; DNA; 20 BP.
XX
AC ADJ54227;
XX
DT 06-MAY-2004 (first entry)
XX
DE Human B7-1 DNA antisense oligonucleotide #25.
XX
KW Airway hyperresponsiveness; pulmonary inflammation;
KW antisense oligonucleotide; human; B7 protein; B7-1; asthma;
KW antiasthmatic; antiinflammatory; ss.
XX
OS Homo sapiens.
XX
PN US2004023917-A1.
XX
PD 05-FEB-2004.
XX
PF 23-MAY-2003; 2003US-00444206.
XX
PR 31-DEC-1996; 96US-00777266.
PR 04-JUN-1999; 99US-00326186.
PR 25-MAY-2000; 2000WO-US014471.
PR 09-MAY-2001; 2001US-00851871.
XX
PA (BENN/) BENNETT C F.
PA (VICK/) VICKERS T A.
PA (KARR/) KARRAS J G.
XX
PI Bennett CF, Vickers TA, Karras JG;
XX
DR WPI; 2004-132608/13.
XX
PT Treating airway hyperresponsiveness or pulmonary inflammation comprises
PT administering an antisense compound targeted to a nucleic acid molecule
PT encoding a human B7 protein to the individual.
XX
PS Example 1; SEQ ID NO 47; 182pp; English.
XX
CC The invention relates to a method for treating airway hyperresponsiveness
CC or pulmonary inflammation in an individual comprising administering an
CC antisense compound targeted to a nucleic acid molecule encoding a human
CC B7 protein. The invention also relates to a method of inhibiting
CC expression of a nucleic acid molecule encoding B7-1 or B7-2. The
CC antisense compound is an antisense oligonucleotide which has a modified
CC sugar moiety and nucleobase. The human B7 protein is human B7-1 or B7-2
CC protein or both. The compound is useful for treating airway
CC hyperresponsiveness or pulmonary inflammation, which is associated with
CC asthma, by inhibiting expression of human B7 protein. This sequence
CC represents an antisense oligonucleotide of the invention.
XX
SQ Sequence 20 BP; 7 A; 4 C; 8 G; 1 T; 0 U; 0 Other;

```
  Query Match             0.4%;  Score 15.8;  DB 1;  Length 20;
  Best Local Similarity   89.5%;  Pred. No. 2e+02;
  Matches   17;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       3766 TGGCTGGGATCCCTCCCCT 3784
              ||||||| ||||||| |||
Db         20 TGGCTGGCATCCCTCTCCT 2
```

RESULT 186
ADL23352/c
ID ADL23352 standard; DNA; 20 BP.
XX
AC ADL23352;
XX
DT 20-MAY-2004 (first entry)
XX
DE Primer #2 for identification of HPV 45.
XX
KW ss; primer; diagnosis; cervical intraepithelial neoplasia; CIN;
KW allelic deletion; FHIT; fragile histidine triad gene; PR;
KW progesterone receptor; DLEC1; deleted in lung and oesophageal cancer 1;
KW TRIM29; tripartite motif-containing 29; microsatellite; D3S1300; D3S1260;
KW D11S35; D11S528.
XX
OS Homo sapiens.
OS Synthetic.
XX
PN WO2004018711-A2.
XX
PD 04-MAR-2004.
XX
PF 20-AUG-2003; 2003WO-GB003637.
XX
PR 24-AUG-2002; 2002GB-00019890.
PR 26-AUG-2002; 2002US-0405717P.
XX
PA (UNLO) UNIV COLLEGE LONDON.
XX
PI Ming-Qing D;
XX
DR WPI; 2004-226867/21.
XX
PT Diagnosing cervical intraepithelial neoplasia comprising detecting an
PT allelic deletion in genes selected from FHIT, PR, DLEC1- or TRIM 29 by
PT comparing the FHIT, PR, DLEC1 and/or TRIM 29 polynucleotides or proteins
PT present in the samples.
XX
PS Disclosure; SEQ ID NO 34; 56pp; English.
XX

CC This sequence represents a primer which was used in the method of the
CC invention for diagnosing susceptibility to persistence or progression of
CC cervical intraepithelial neoplasia (CIN) in an individual suffering from
CC the disease. The method comprises detecting an allelic deletion in one or
CC more genes selected from FHIT (fragile histidine triad gene), PR
CC (progesterone receptor), DLEC1 (deleted in lung and oesophageal cancer 1)
CC or TRIM29 (tripartite motif-containing 29) by comparing the FHIT, PR,
CC DLEC1 and/or TRIM29 polynucleotides or proteins present in the samples
CC derived from non-dyskaryotic and dyskaryotic samples, respectively. The
CC method is carried out using a kit comprising a panel of two or more pairs
CC of primers, where each pair of primers is suitable for amplifying a
CC microsatellite DNA marker selected from D3S1300, D3S1260, D11S35 or
CC D11S528, or a panel of two or more specific binding agents, where each
CC binding agent is capable of distinguishing between the normal and allelic
CC deletion forms of a polynucleotide or protein selected from FHIT, PR,
CC TRIM29 or DLEC1. The method is useful for diagnosing susceptibility to
CC persistence or progression of cervical intraepithelial neoplasia in an
CC individual suffering from the disease.
XX
SQ Sequence 20 BP; 1 A; 4 C; 6 G; 9 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 2e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

```
Qy       1995 ACACCTTCAGATAAGCAGG 2013
              |||||| |||| |||||||
Db         20 ACACCTCCAGAAAAGCAGG 2
```

RESULT 187
ADL27792/c
ID ADL27792 standard; DNA; 20 BP.
XX
AC ADL27792;
XX
DT 20-MAY-2004 (first entry)
XX
DE Human Fas cDNA, antisense oligonucleotide #72.
XX
KW Antisense therapy; human; Fas; Fas ligand; FasL; Apo-1L; CD95L;
KW Fas associated protein 1; Fap-1; signal transduction; autoimmune disease;
KW inflammatory disease; cancer; immunosuppressive; antiinflammatory;
KW cytostatic; phosphorothioate; ss.
XX
OS Homo sapiens.
XX

FH	Key	Location/Qualifiers
FT	modified_base	1. .20
FT		/*tag= a
FT		/mod_base= OTHER
FT		/note= "This oligonucleotide has a phosphorothioate
FT		backbone and 2'-methyoxyethyl (2'-MOE) wings at the 5'
FT		and 3' ends, which are 5 nucleotides in length at each
FT		end. All cytidine residues are 5-methylcytidines"

XX
PN US6653133-B1.
XX
PD 25-NOV-2003.
XX
PF 18-SEP-2000; 2000US-00665615.
XX
PR 12-APR-1999; 99US-00290640.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Dean NM, Marcusson EG, Wyatt J;
XX
DR WPI; 2004-050524/05.
XX
PT New antisense oligonucleotides of 20-50 nucleobases, useful for treating
PT autoimmune or inflammatory diseases, and cancer.
XX
PS Example 18; SEQ ID NO 153; 76pp; English.
XX
CC The present invention relates to antisense compounds targeted to nucleic
CC acids encoding human Fas (also known as Apo-1 or CD95), Fas ligand (FasL,
CC also Apo-1L and CD95L), and Fas associated protein 1 (Fap-1). The
CC antisense compound comprises an antisense oligonucleotide that
CC specifically hybridises with one of the said nucleic acids and inhibits
CC Fas, FasL or Fap-1 mediated signal transduction. The antisense
CC oligonucleotide is a chimeric oligonucleotide. The antisense
CC oligonucleotide comprises at least one modified internucleoside linkage,
CC preferably a phosphorothioate linkage. It also comprises at least one
CC modified sugar moiety, preferably a 2'-O-methoxyethyl (2'-MOE) sugar
CC moiety. The antisense oligonucleotide further comprises at least one
CC modified nucleobase, preferably a 5-methylcytosine. The antisense
CC oligonucleotides are useful for the treatment of autoimmune or
CC inflammatory diseases, and cancers associated with overexpression of or
CC constitutive activation of Fas, FasL, or Fap-1. The present sequence
CC represents an antisense oligonucleotide used in the examples of the
CC present invention.
XX
SQ Sequence 20 BP; 9 A; 1 C; 0 G; 10 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 2e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

```
Qy        861 TTAAGAAATAATTTTGATA 879
              |||||||||||| || |||
Db         20 TTAAGAAATAATATTTATA 2
```

RESULT 188
ADM53564/c
ID ADM53564 standard; DNA; 20 BP.
XX
AC ADM53564;
XX
DT 03-JUN-2004 (first entry)
XX
DE Human Fas antisense oligonucleotide seqid 153.
XX
KW immunosuppressive; antiinflammatory; hepatotropic; virucide; cytostatic;
KW antisense technology; Fas; Fas ligand; Fap-1; Fas associated disorder;
KW Fap-1 associated disorder; ischaemia reperfusion injury; apoptosis;
KW allograft; autoimmune disease; inflammatory disease; hepatitis; cancer;
KW lymphoma; human; antisense oligonucleotide; ss.
XX
OS Homo sapiens.
XX

FH	Key	Location/Qualifiers
FT	modified_base	1. .20
FT		/*tag= b
FT		/mod_base= OTHER
FT		/note= "OTHER= Phosphorothioate backbone. All cytidines
FT		are 5-methylcytidines"
FT	modified_base	1. .5
FT		/*tag= a
FT		/mod_base= OTHER
FT		/note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
FT	modified_base	15. .20
FT		/*tag= c
FT		/mod_base= OTHER
FT		/note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"

XX
PN US2004033979-A1.
XX
PD 19-FEB-2004.
XX
PF 14-JUL-2003; 2003US-00619220.
XX
PR 12-APR-1999; 99US-00290640.
PR 18-SEP-2000; 2000US-00665615.
PR 09-MAR-2001; 2001US-00802669.

XX
PA (DEAN/) DEAN N M.
PA (MARC/) MARCUSSON E G.
PA (WYAT/) WYATT J.
PA (ZHAN/) ZHANG H.
XX
PI Dean NM, Marcusson EG, Wyatt J, Zhang H;
XX
DR WPI; 2004-180091/17.
XX
PT New antisense compound targeted to nucleic acid molecule encoding Fas or
PT Fap-1, useful in diagnosing, treating or preventing autoimmune or
PT inflammatory disease, cancer, apoptosis, allograft rejection or ischemia
PT reperfusion injury.
XX
PS Example 18; SEQ ID NO 153; 83pp; English.
XX
CC The invention describes an antisense compound 8-30 or 8-50 nucleobases in
CC length targeted to the 5'-untranslated region, translational start site,
CC translational termination region or 3'-untranslated region of a nucleic
CC acid molecule encoding Fas, Fas ligand or Fap-1. Also described are: a
CC pharmaceutical composition comprising the anti-sense compound and a
CC pharmaceutical carrier or diluent; a method of inhibiting the expression
CC of Fas or Fap-1 in cells or tissues: treating an animal having a disease
CC or condition associated with Fas or Fap-1; anda preventing allograft
CC rejection, ischaemia reperfusion injury or apoptosis in an allograft
CC recipient. The antisense compound and pharmaceutical composition is
CC useful in diagnosing, treating or preventing autoimmune or inflammatory
CC disease, e.g. hepatitis, cancer, e.g. cancer of the colon, liver, lung or
CC a lymphoma, apoptosis, allograft rejection, e.g. cardiac, renal, hepatic
CC or skin allograft and ischemia reperfusion injury. This sequence
CC represents a human Fas antisense oligonucleotide.
XX
SQ Sequence 20 BP; 9 A; 1 C; 0 G; 10 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 2e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 861 TTAAGAAATAATTTTGATA 879
||||||||||| || |||
Db 20 TTAAGAAATAATATTTATA 2

RESULT 189
ADO45209
ID ADO45209 standard; DNA; 20 BP.
XX
AC ADO45209;
XX
DT 15-JUL-2004 (first entry)
XX
DE Human oligonucleotide #575.
XX
KW Human; ss; interleukin-4 receptor; IL-4; interleukin-5 receptor; IL-5;
KW CCR1; CCR3; Eotaxin-1; RANTES; MCP4; CD23; ICAM; VCAM; tryptase a;
KW tryptase b; PDE4 A; PDE4 B; PDE4 C; PDE4 D; respiratory disease;
KW lung disease; hyper-responsiveness; adenosine; adenosine A receptor;
KW asthma; lung allergy; inflammation; inflammatory disease;
KW airway inflammation; allergy; impeded respiration; cystic fibrosis; CF;
KW chronic obstructive pulmonary disease; COPD; allergic rhinitis;
KW acute respiratory distress syndrome; pulmonary hypertension;
KW lung inflammation; bronchitis; airway obstruction; bronchoconstriction.
XX
OS Homo sapiens.
XX
PN US2004049022-A1.
XX
PD 11-MAR-2004.
XX
PF 25-JUL-2003; 2003US-00627930.
XX
PR 23-APR-2002; 2002WO-US013135.
PR 23-APR-2002; 2002WO-US013143.
XX
PA (NYCE/) NYCE J W.
PA (SAND/) SANDRASAGRA A.
PA (TANG/) TANG L.
PA (AGUI/) AGUILAR D.
PA (MILL/) MILLER S.
PA (SHAH/) SHAHABUDDIN S.
PA (LUHH/) LU H.
PA (CONG/) CONG H.
XX
PI Nyce JW, Sandrasagra A, Tang L, Aguilar D, Miller S;
PI Shahabuddin S, Lu H, Cong H;
XX
DR WPI; 2004-293804/27.
XX
PT Novel single or multiple target oligonucleotide anti-sense to e.g.
PT initiation codon, intron of respiratory disease-relevant gene e.g. CCR1,
PT RANTES, MCP4, useful for prophylaxis or treating respiratory disease e.g.
PT asthma.
XX
PS Claim 2; SEQ ID NO 575; 174pp; English.
XX
CC The invention relates to oligonucleotides anti-sense to an initiation
CC codon, coding region, 5' or 3' intron-exon junction, intron or region
CC with 2-10 nucleotides of the 5'-end or 3'-end of a nucleic acid target
CC chosen from a gene encoding interleukin (IL)-4 receptor, interleukin (IL)
CC -5 receptor, CCR1, CCR3, Eotaxin-1, RANTES, MCP4, CD23, ICAM, VCAM,
CC tryptase a, tryptase b, PDE4 A, PDE4 B, PDE4 C or PDE4 D. The invention
CC also relates to a method of screening a candidate compound that binds to
CC one or more nucleic acid target(s) or expressed product(s), for the
CC prevention and/or treatment of a respiratory or lung disease. The
CC oligonucleotides are useful for reducing or inhibiting expression of a
CC gene or mRNA encoding interleukin-4 receptor, interleukin-5 receptor,
CC CCR1, CCR3, Eotaxin-1, RANTES, MCP4, CD23, ICAM, VCAM, tryptase a,
CC tryptase b, PDE4 A, PDE4 B, PDE4 C, or PDE4 D. The oligonucleotides are
CC useful for preventing or treating a respiratory or lung disease. The
CC respiratory or lung disease is associated with hyper-responsiveness to
CC and/or increased levels of, adenosine and/or levels of adenosine A
CC receptor(s), and/or asthma and/or lung allergies associated with
CC inflammation or an inflammatory disease. The respiratory or lung disease
CC is chosen from airway inflammation, allergy, asthma, impeded respiration,
CC cystic fibrosis (CF), chronic obstructive pulmonary disease (COPD),
CC allergic rhinitis, acute respiratory distress syndrome, pulmonary
CC hypertension, lung inflammation, bronchitis, airway obstruction or
CC bronchoconstriction. This sequence represents an oligonucleotide of the
CC invention.
XX
SQ Sequence 20 BP; 3 A; 7 C; 4 G; 6 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 2e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 2707 GAGGCATTTCTTGCCCAGC 2725
||||||||||||| ||| |
Db 1 GAGGCATTTCTTGTCCACC 19

RESULT 190
ADO46292/c
ID ADO46292 standard; DNA; 20 BP.
XX
AC ADO46292;
XX
DT 15-JUL-2004 (first entry)
XX
DE Human oligonucleotide #1658.
XX
KW Human; ss; interleukin-4 receptor; IL-4; interleukin-5 receptor; IL-5;
KW CCR1; CCR3; Eotaxin-1; RANTES; MCP4; CD23; ICAM; VCAM; tryptase a;
KW tryptase b; PDE4 A; PDE4 B; PDE4 C; PDE4 D; respiratory disease;
KW lung disease; hyper-responsiveness; adenosine; adenosine A receptor;

KW asthma; lung allergy; inflammation; inflammatory disease;
KW airway inflammation; allergy; impeded respiration; cystic fibrosis; CF;
KW chronic obstructive pulmonary disease; COPD; allergic rhinitis;
KW acute respiratory distress syndrome; pulmonary hypertension;
KW lung inflammation; bronchitis; airway obstruction; bronchoconstriction.
XX
OS Homo sapiens.
XX
PN US2004049022-A1.
XX
PD 11-MAR-2004.
XX
PF 25-JUL-2003; 2003US-00627930.
XX
PR 23-APR-2002; 2002WO-US013135.
PR 23-APR-2002; 2002WO-US013143.
XX
PA (NYCE/) NYCE J W.
PA (SAND/) SANDRASAGRA A.
PA (TANG/) TANG L.
PA (AGUI/) AGUILAR D.
PA (MILL/) MILLER S.
PA (SHAH/) SHAHABUDDIN S.
PA (LUHH/) LU H.
PA (CONG/) CONG H.
XX
PI Nyce JW, Sandrasagra A, Tang L, Aguilar D, Miller S;
PI Shahabuddin S, Lu H, Cong H;
XX
DR WPI; 2004-293804/27.
XX
PT Novel single or multiple target oligonucleotide anti-sense to e.g.
PT initiation codon, intron of respiratory disease-relevant gene e.g. CCR1,
PT RANTES, MCP4, useful for prophylaxis or treating respiratory disease e.g.
PT asthma.
XX
PS Claim 2; SEQ ID NO 1659; 174pp; English.
XX
CC The invention relates to oligonucleotides anti-sense to an initiation
CC codon, coding region, 5' or 3' intron-exon junction, intron or region
CC with 2-10 nucleotides of the 5'-end or 3'-end of a nucleic acid target
CC chosen from a gene encoding interleukin (IL)-4 receptor, interleukin (IL)
CC -5 receptor, CCR1, CCR3, Eotaxin-1, RANTES, MCP4, CD23, ICAM, VCAM,
CC tryptase a, tryptase b, PDE4 A, PDE4 B, PDE4 C or PDE4 D. The invention
CC also relates to a method of screening a candidate compound that binds to
CC one or more nucleic acid target(s) or expressed product(s), for the
CC prevention and/or treatment of a respiratory or lung disease. The
CC oligonucleotides are useful for reducing or inhibiting expression of a
CC gene or mRNA encoding interleukin-4 receptor, interleukin-5 receptor,
CC CCR1, CCR3, Eotaxin-1, RANTES, MCP4, CD23, ICAM, VCAM, tryptase a,
CC tryptase b, PDE4 A, PDE4 B, PDE4 C, or PDE4 D. The oligonucleotides are
CC useful for preventing or treating a respiratory or lung disease. The
CC respiratory or lung disease is associated with hyper-responsiveness to
CC and/or increased levels of, adenosine and/or levels of adenosine A
CC receptor(s), and/or asthma and/or lung allergies associated with
CC inflammation or an inflammatory disease. The respiratory or lung disease
CC is chosen from airway inflammation, allergy, asthma, impeded respiration,
CC cystic fibrosis (CF), chronic obstructive pulmonary disease (COPD),
CC allergic rhinitis, acute respiratory distress syndrome, pulmonary
CC hypertension, lung inflammation, bronchitis, airway obstruction or
CC bronchoconstriction. This sequence represents an oligonucleotide of the
CC invention.
XX
SQ Sequence 20 BP; 3 A; 6 C; 8 G; 3 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 2e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 2508 CAGGTGGAGCTGTACCGCC 2526
|| |||||||||||||||
Db 20 CCGCTGGAGCTGTACCGCC 2

RESULT 191
ADO51802
ID ADO51802 standard; DNA; 20 BP.
XX
AC ADO51802;
XX
DT 12-AUG-2004 (first entry)
XX
DE Human ADAM15 target oligonucleotide #26.
XX
KW ADAM15; metagirdin; MDC15; a disintegrin and metalloproteinase domain 15;
KW diagnosis; inflammation; therapy; human; ss.
XX
OS Homo sapiens.
XX
PN US2004102392-A1.
XX
PD 27-MAY-2004.
XX
PF 21-NOV-2002; 2002US-00302028.
XX
PR 21-NOV-2002; 2002US-00302028.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Bennett CF, Dean NM, Dobie KW;
XX
DR WPI; 2004-399722/37.
XX
PT New compound targeted to a nucleic acid molecule encoding ADAM15 and
PT inhibits the expression of ADAM15, useful for modulating the expression
PT of ADAM15 or for diagnosing or treating, e.g. inflammation.
XX
PS Example 15; SEQ ID NO 73; 38pp; English.
XX
CC The present invention is directed to antisense oligonucleotides targeted
CC to ADAM15 (otherwise known as metagirdin, MDC15, and a disintegrin and
CC metalloproteinase domain 15) and which modulate the expression of ADAM15.
CC The invention is useful for diagnosing and treating diseases associated
CC with expression of ADAM15 such as inflammation. The present sequence is
CC human ADAM15 target oligonucleotide. This sequence is used in the
CC exemplification of the invention.
XX
SQ Sequence 20 BP; 6 A; 5 C; 6 G; 3 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 2e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 2601 AAAGCCCTGCTGGATGGTA 2619
|||||||| |||||||| |
Db 2 AAAGCCCTCCTGGATGGAA 20

RESULT 192
ADO51767/c
ID ADO51767 standard; DNA; 20 BP.
XX
AC ADO51767;
XX
DT 12-AUG-2004 (first entry)
XX
DE Human ADAM15 antisense oligonucleotide ISIS #173654.
XX
KW ADAM15; metagirdin; MDC15; a disintegrin and metalloproteinase domain 15;
KW diagnosis; inflammation; therapy; human; antisense;
KW phosphorothioate backbone; ss.
XX
OS Homo sapiens.
OS Synthetic.
XX
FH Key Location/Qualifiers

```
FT   modified_base   1. .20
FT                   /*tag=  b
FT                   /mod_base= OTHER
FT                   /note= "Phosphorothioate backbone where all cytidines are
FT                   5-methyl cytidines"
FT   modified_base   1. .5
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "2' -methoxyethyl (2' -MOE) nucleotides"
FT   modified_base   16. .20
FT                   /*tag=  c
FT                   /mod_base= OTHER
FT                   /note= "2' -methoxyethyl (2' -MOE) nucleotides"
XX
PN   US2004102392-A1.
XX
PD   27-MAY-2004.
XX
PF   21-NOV-2002; 2002US-00302028.
XX
PR   21-NOV-2002; 2002US-00302028.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Bennett CF,  Dean NM,  Dobie KW;
XX
DR   WPI; 2004-399722/37.
XX
PT   New compound targeted to a nucleic acid molecule encoding ADAM15 and
PT   inhibits the expression of ADAM15, useful for modulating the expression
PT   of ADAM15 or for diagnosing or treating, e.g. inflammation.
XX
PS   Example 15; SEQ ID NO 38; 38pp; English.
XX
CC   The present invention is directed to antisense oligonucleotides targeted
CC   to ADAM15 (otherwise known as metagirdin, MDC15, and a disintegrin and
CC   metalloproteinase domain 15) and which modulate the expression of ADAM15.
CC   The invention is useful for diagnosing and treating diseases associated
CC   with expression of ADAM15 such as inflammation. The present sequence is
CC   human ADAM15 antisense oligonucleotide. This sequence is used in the
CC   exemplification of the invention.
XX
SQ   Sequence 20 BP; 3 A; 6 C; 5 G; 6 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 15.8;  DB 1;  Length 20;
  Best Local Similarity   89.5%;  Pred. No. 2e+02;
  Matches   17;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       2601 AAAGCCCTGCTGGATGGTA 2619
              ||||||| |||||||| |
Db         19 AAAGCCCTCCTGGATGGAA 1


RESULT 193
ADN30059/c
ID   ADN30059 standard; DNA; 20 BP.
XX
AC   ADN30059;
XX
DT   12-AUG-2004  (first entry)
XX
DE   Human cytokine-inducible kinase antisense oligonucleotide #30.
XX
KW   cytostatic; antisense therapy; cytokine-inducible kinase;
KW   cytokine-inducible kinase inhibitor; antisense technology;
KW   cytokine-inducible kinase expression; hyperproliferative disorder; human;
KW   antisense oligonucleotide; ss.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag=  b
FT                   /mod_base= OTHER
FT                   /note= "OTHER= Phosphorothioate backbone. All cytidines
FT                   are 5-methylcytidines"
FT   modified_base   1. .5
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
FT   modified_base   15. .20
FT                   /*tag=  c
FT                   /mod_base= OTHER
FT                   /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
XX
PN   US2004101857-A1.
XX
PD   27-MAY-2004.
XX
PF   23-NOV-2002; 2002US-00304116.
XX
PR   23-NOV-2002; 2002US-00304116.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Ward DT,  Dobie KW;
XX
DR   WPI; 2004-399685/37.
XX
PT   New antisense oligonucleotides useful for modulating Cytokine-inducible
PT   kinase expression, useful for diagnosing, preventing or treating
PT   conditions associated with aberrant kinase expression e.g.
PT   hyperproliferative disorders.
XX
PS   Example 15; SEQ ID NO 45; 56pp; English.
XX
CC   The invention describes a compound 8-80 nucleobases in length targeted to
CC   a nucleic acid molecule encoding Cytokine-inducible kinase. The compound
CC   specifically hybridises with the nucleic acid molecule encoding Cytokine-
CC   inducible kinase (which comprises a sequence of 2169 bp fully defined in
CC   the specification) and inhibits the expression of Cytokine-inducible
CC   kinase. Also described are: a method of inhibiting the expression of
CC   Cytokine-inducible kinase in cells or tissues, comprising contacting the
CC   cells or tissues with the new compound so that the expression of Cytokine
CC   -inducible kinase is inhibited; a method of screening for a modulator of
CC   Cytokine-inducible kinase, comprising contacting a preferred target
CC   segment of the nucleic acid encoding Cytokine-inducible kinase with one
CC   or more candidate modulators of Cytokine-inducible kinase, and
CC   identifying one or more modulators that modulate the expression of
CC   Cytokine-inducible kinase; a diagnostic method for identifying a disease
CC   state, comprising identifying the presence of Cytokine-inducible kinase
CC   in a sample using at least one of the primers or probe comprising the
CC   nucleotide sequences as mentioned in the specification; a kit or assay
CC   device comprising the above compound; and a method of treating an animal
CC   having a disease or condition associated with Cytokine-inducible kinase,
CC   comprising administering to the animal a therapeutic or prophylactic
CC   amount of the compound so that expression of Cytokine-inducible kinase is
CC   inhibited. The antisense oligonucleotide is useful for inhibiting the
CC   expression of Cytokine-inducible kinase in cells or tissues to prevent or
CC   treat diseases associated with the kinase expression, such as
CC   hyperproliferative disorders. In addition, the compound is used for
CC   diagnostics, prophylaxis, or as research reagents or kits. This sequence
CC   represents a human cytokine-inducible kinase antisense oligonucleotide.
XX
SQ   Sequence 20 BP; 4 A; 7 C; 6 G; 3 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 15.8;  DB 1;  Length 20;
  Best Local Similarity   89.5%;  Pred. No. 2e+02;
  Matches   17;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       2387 CATCCAGAGCCGCTGGTGT 2405
                || |||||||| |||||||
Db         20 CAGCCAGAGCCTCTGGTGT 2


RESULT 194
```

```
ADP11285
ID   ADP11285 standard; DNA; 20 BP.
XX
AC   ADP11285;
XX
DT   12-AUG-2004  (first entry)
XX
DE   Set 1 right PCR primer for marker probe #299.
XX
KW   transplant rejection; immune system; rheumatoid arthritis; lupus;
KW   inflammatory bowel disease; multiple sclerosis; HIV; AIDS; ss; primer.
XX
OS   Homo sapiens.
XX
PN   WO2004042346-A2.
XX
PD   21-MAY-2004.
XX
PF   24-APR-2003; 2003WO-US012946.
XX
PR   24-APR-2002; 2002US-00131831.
PR   20-DEC-2002; 2002US-00325899.
XX
PA   (EXPR-) EXPRESSION DIAGNOSTICS INC.
XX
PI   Wohlgemuth J,  Fry K,  Woodward R,  Ly N,  Prentice J,  Morris M;
PI   Rosenberg S;
XX
DR   WPI; 2004-400724/37.
XX
PT   Diagnosing or monitoring transplant rejection, e.g. heart, kidney, liver,
PT   pancreas, pancreatic islet, lung, bone marrow or stem cell transplant
PT   rejection, in an individual, comprises detecting the expression level of
PT   the genes.
XX
PS   Claim 58; SEQ ID NO 1294; 1762pp; English.
XX
CC   The present invention relates to diagnosing or monitoring transplant
CC   rejection, e.g. cardiac or kidney transplant rejection, in an individual
CC   comprises detecting the expression level of one or more genes. The
CC   methods, system and kits are useful in diagnosing or monitoring
CC   transplant rejection, e.g. heart, kidney, liver, pancreas, pancreatic
CC   islet, lung, bone marrow or stem cell transplant rejection,
CC   xenotransplant rejection or mechanical organ replacement rejection, in an
CC   individual. The method is also useful in assessing the immune status of
CC   an individual. The methods are also useful in diagnosing and monitoring
CC   diseases that involve the immune system, e.g. rheumatoid arthritis,
CC   lupus, inflammatory bowel diseases, multiple sclerosis, HIV/AIDS or
CC   viral, bacterial or fungal infection. The present sequence represents a
CC   primer for a 50 mer oligonucleotide marker for diagnosis and monitoring
CC   of allograft rejection and other disorders.
XX
SQ   Sequence 20 BP; 5 A; 5 C; 6 G; 4 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 15.8;  DB 1;  Length 20;
  Best Local Similarity   89.5%;  Pred. No. 2e+02;
  Matches   17;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       2008 AGCAGGGCATGCCTGTGCT 2026
              ||||||  ||||||||||||
Db          1 AGCAGGAAATGCCTGTGCT 19


RESULT 195
ADQ88907
ID   ADQ88907 standard; DNA; 20 BP.
XX
AC   ADQ88907;
XX
DT   23-SEP-2004  (first entry)
XX
DE   Breast cancer associated polymorphism detection primer #5.
XX
KW   cytostatic; gene therapy; breast cancer; polymorphism detection; PCR;
KW   primer; ss.
XX
OS   Homo sapiens.
XX
PN   WO2004055196-A2.
XX
PD   01-JUL-2004.
XX
PF   25-NOV-2003; 2003WO-US037831.
XX
PR   25-NOV-2002; 2002US-0429136P.
PR   24-JUL-2003; 2003US-0490234P.
XX
PA   (SEQU-) SEQUENOM INC.
XX
PI   Roth RB,  Nelson MR,  Braun A,  Kammerer SM,  Reneland R;
XX
DR   WPI; 2004-517424/49.
XX
PT   Identifying a subject at risk of breast cancer comprises detecting the
PT   presence or absence of one or more polymorphic variations associated with
PT   breast cancer in a nucleic acid sample from a subject.
XX
PS   Example 2; Page 59; 83pp; English.
XX
CC   The invention describes a method of identifying (M1) a subject at risk of
CC   breast cancer. The method comprises detecting the presence or absence of
CC   one or more polymorphic variations associated with breast cancer in a
CC   nucleic acid sample from a subject. The methods, nucleic acids, proteins,
CC   and compositions are useful for diagnosing, preventing, and treating
CC   breast cancer. Also described is a method useful for identifying
CC   candidate therapeutics for treating breast cancer. This sequence
CC   represents a primer used to analyse polymorphisms associated with breast
CC   cancer.
XX
SQ   Sequence 20 BP; 7 A; 3 C; 5 G; 5 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 15.8;  DB 1;  Length 20;
  Best Local Similarity   89.5%;  Pred. No. 2e+02;
  Matches   17;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       2233 ATGAGCTAGTAAAGAATTT 2251
              ||||||.||||.|||||||
Db          1 ATGAGCCAGTACAGAATTT 19


RESULT 196
ADQ29449
ID   ADQ29449 standard; DNA; 20 BP.
XX
AC   ADQ29449;
XX
DT   07-OCT-2004  (first entry)
XX
DE   Human TNF alpha antisense oligonucleotide seqid 380.
XX
KW   antimicrobial; antidiabetic; antirheumatic; antiarthritic;
KW   gastrointestinal; antiinflammatory; neuroprotective; dermatological;
KW   virucide; hepatotropic; human; TNF-alpha; tumour necrosis factor alpha;
KW   survivin; TNF-alpha associated disorder; infection; diabetes;
KW   rheumatoid arthritis; Crohn's disease; pancreatitis; multiple sclerosis;
KW   atopic dermatitis; hepatitis; antisense oligonucleotide;
KW   antisense technology; ss.
XX
OS   Homo sapiens.
XX
PN   US2004142346-A1.
XX
PD   22-JUL-2004.
XX
PF   29-AUG-2003; 2003US-00652795.
XX
```

```
PR   05-OCT-1998;   98US-00166186.
PR   18-MAY-1999;   99US-00313932.
PR   02-APR-2001; 2001US-00824322.
XX
PA   (BAKE/) BAKER B F.
PA   (BENN/) BENNETT C F.
PA   (BUTL/) BUTLER M M.
PA   (SHAN/) SHANAHAN W R.
XX
PI   Baker BF,  Bennett CF,  Butler MM,  Shanahan WR;
XX
DR   WPI; 2004-552557/53.
XX
PT   New double stranded RNA compound inhibiting expression of human TNF-alpha
PT   and survivin, useful for diagnosing, preventing or treating infection,
PT   diabetes, arthritis, multiple sclerosis and hepatitis.
XX
PS   Example 24; SEQ ID NO 380; 156pp; English.
XX
CC   The invention describes a double stranded RNA compound 8-80 nucleobases
CC   in length targeted to a nucleic acid molecule encoding human TNF-alpha,
CC   where the compound specifically hybridises with the nucleic acid molecule
CC   encoding TNF-alpha and inhibits the expression of survivin. Also
CC   described is a double stranded RNA compound having a fully defined
CC   sequence of 20 bp (SEQ ID NO: 432) as given in the specification. Also
CC   disclosed are TNF-alpha polypeptides, host cells, vectors and antibodies
CC   used in the methods of the invention. The methods and compositions of the
CC   present invention are useful for the diagnosis, prevention and/or
CC   treatment of diseases or conditions associated with aberrant expression
CC   or activity of TNF-alpha, such as infection, diabetes, rheumatoid
CC   arthritis, Crohn's disease, pancreatitis, multiple sclerosis, atopic
CC   dermatitis and hepatitis. This sequence represents a human tumour
CC   necrosis factor alpha (TNF-alpha) antisense oligonucleotide.
XX
SQ   Sequence 20 BP; 7 A; 4 C; 5 G; 4 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 15.8;  DB 1;  Length 20;
  Best Local Similarity   89.5%;  Pred. No. 2e+02;
  Matches   17;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       3414 TTTCAAGGAAGTATGGAAA 3432
              | |||||||||| ||||||
Db          1 TCTCAAGGAAGTCTGGAAA 19


RESULT 197
ADR02965
ID   ADR02965 standard; DNA; 20 BP.
XX
AC   ADR02965;
XX
DT   21-OCT-2004  (first entry)
XX
DE   Antisense oligonucleotide targeting human TNFalpha ISIS104785.
XX
KW   Human; tumour necrosis factor alpha; TNFalpha; ss;
KW   antisense gene therapy; inflammatory disorder; phosphorothioate linkage;
KW   methylene(methylimino) intersugar linkage; infection; autoimmune disease;
KW   diabetes; rheumatoid arthritis; Crohn's disease; pancreatitis;
KW   multiple sclerosis; atopic dermatitis; inflammatory bowel disease;
KW   colitis; hepatitis.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag=  b
FT                   /mod_base= OTHER
FT                   /note= "All Cytidines are 5-merthylcytidines"
FT   modified_base   1. .5
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "Phosphorothioate linkages  and 2'-methoxyethyl
FT                   residues"
FT   modified_base   16. .20
FT                   /*tag=  c
FT                   /mod_base= OTHER
FT                   /note= "Phosphorothioate linkages  and 2'-methoxyethyl
FT                   residues"
XX
PN   US2004152652-A1.
XX
PD   05-AUG-2004.
XX
PF   26-AUG-2003; 2003US-00647918.
XX
PR   05-OCT-1998;   98US-00166186.
PR   18-MAY-1999;   99US-00313932.
PR   02-APR-2001; 2001US-00824322.
XX
PA   (BAKE/) BAKER B F.
PA   (BENN/) BENNETT C F.
PA   (BUTL/) BUTLER M M.
PA   (SHAN/) SHANAHAN W R.
XX
PI   Baker BF,  Bennett CF,  Butler MM,  Shanahan WR;
XX
DR   WPI; 2004-580193/56.
XX
PT   Treating inflammatory disorders, such as diabetes, rheumatoid arthritis
PT   and multiple sclerosis, using antisense oligonucleotides targeted to
PT   nucleic acids encoding human tumor necrosis factor-alpha (TNF-alpha).
XX
PS   Example 24; SEQ ID NO 380; 145pp; English.
XX
CC   The invention relates to treating an inflammatory disorder in an
CC   individual comprising administering an oligonucleotide (an antisense
CC   oligonucleotide) up to 30 nucleotides in length complementary to a
CC   nucleic acid molecule encoding human tumour necrosis factor-alpha (TNF-
CC   alpha). The oligonucleotide useful in treating an inflammatory disorder
CC   inhibits the expression of the human tumour necrosis factor-alpha, and
CC   comprises at least an 8 nucleobase portion of any of 50 20-21 base pair
CC   sequences, given in the specification. The antisense oligonucleotide is
CC   administered orally, topically or parenterally. The oligonucleotide
CC   comprises at least one modified intersugar linkage. The intersugar
CC   linkage is a phosphorothioate linkage. The oligonucleotide further
CC   comprises at least one 2'-O-methoxyethyl modification and at least one 5-
CC   methyl cytidine, where every 2'-O-methoxyethyl modified cytidine residue
CC   is a 5-methyl cytidine, and where every cytidine residue is a 5-methyl
CC   cytidine. The modified intersugar linkage is a methylene(methylimino)
CC   intersugar linkage. The methods and compositions of the present invention
CC   are useful for the diagnosis, prevention and/or treatment of diseases or
CC   conditions associated with aberrant expression or activity of the TNF-
CC   alpha, such as inflammatory, infectious and autoimmune diseases,
CC   including diabetes, rheumatoid arthritis, Crohn's disease, pancreatitis,
CC   multiple sclerosis, atopic dermatitis, inflammatory bowel disease,
CC   colitis and hepatitis. The present sequence is an antisense
CC   oligonucleotide targeting the human TNFalpha gene.
XX
SQ   Sequence 20 BP; 7 A; 4 C; 5 G; 4 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 15.8;  DB 1;  Length 20;
  Best Local Similarity   89.5%;  Pred. No. 2e+02;
  Matches   17;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       3414 TTTCAAGGAAGTATGGAAA 3432
              | |||||||||| ||||||
Db          1 TCTCAAGGAAGTCTGGAAA 19


RESULT 198
AAZ11675/c
ID   AAZ11675 standard; DNA; 21 BP.
XX
AC   AAZ11675;
XX
```

DT 27-AUG-2003 (revised)
DT 19-NOV-1999 (first entry)
XX
DE Oligo specific for EBV BARF-1 RNA.
XX
KW Epstein Barr Virus; EBV infection; viral; gene transcription; EBER-1;
KW Epstein Barr early RNA; Epstein Barr nuclear antigen 1; EBNA-1; LMP-1;
KW latent membrane protein; LMP-2; vIL10; BCRF-1; BARF1; BDLF2; NASBA;
KW EBV-associated malignancy; primer; ss.
XX
OS Synthetic.
OS Human herpesvirus 4.
XX
PN WO9945155-A2.
XX
PD 10-SEP-1999.
XX
PF 01-MAR-1999; 99WO-EP001392.
XX
PR 04-MAR-1998; 98EP-00200655.
PR 14-DEC-1998; 98EP-00204231.
XX
PA (ALKU) AKZO NOBEL NV.
XX
PI Vervoort MBHJ, Van Den Brule AJC, Middeldorp JM;
XX
DR WPI; 1999-551051/46.
XX
PT Identifying Epstein Barr Virus infection.
XX
PS Claim 11; Page 21; 50pp; English.
XX
CC The invention provides methods for identifying an Epstein Barr Virus
CC (EBV) infection, that comprises determining viral gene transcription
CC patterns by amplification of specific RNA sequences. The binding sites of
CC the oligos suitable for amplification are located in the following genes:
CC Epstein Barr early RNA (EBER-1), Epstein Barr nuclear antigen 1 (EBNA-1).
CC latent membrane protein 1 (LMP-1), LMP-2, and vIL10 (BCRF-1), BARF1 and
CC BDLF2. The method comprises (a) amplifying a target sequence within one
CC or more RNA(s) transcribed from above gene sequences and the (b)
CC detecting the amplified products, determining the transcription pattern
CC and identifying the corresponding EBV-associated malignancy. The RNA is
CC amplified using a transcription based amplification technique such as
CC NASBA. The invention is used to diagnose malignant and non-malignant EBV-
CC associated diseases. Sequences AAZ11672-75 represent oligos specific for
CC BARF-1 RNA. (Updated on 27-AUG-2003 to correct OS field.)
XX
SQ Sequence 21 BP; 5 A; 3 C; 9 G; 4 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.8; DB 1; Length 21;
Best Local Similarity 89.5%; Pred. No. 2.2e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 2319 GCTGCCAACATCATCCATG 2337
||||||||||| |||||
Db 21 GCTGCCAACATCTCCCATG 3

RESULT 199
AAV72092/c
ID AAV72092 standard; cDNA; 21 BP.
XX
AC AAV72092;
XX
DT 12-APR-1999 (first entry)
XX
DE Mouse MSP PCR primer #2.
XX
KW MSP; macrophage stimulating protein; apoptosis; murine; treatment;
KW neuroendocrine cell; RON receptor; small cell lung carcinoma; tumour;
KW pathogen infection; thrombocyte production; megakaryocyte maturation;
KW thrombocytopaenia; hepatocyte growth; PCR primer; ss.
XX
OS Synthetic.
OS Mus sp.
XX
PN WO9855141-A1.
XX
PD 10-DEC-1998.
XX
PF 04-JUN-1998; 98WO-US011573.
XX
PR 04-JUN-1997; 97US-0048594P.
XX
PA (BGHM) BRIGHAM & WOMENS HOSPITAL.
XX
PI Sunday ME, Willet C;
XX
DR WPI; 1999-059877/05.
XX
PT Treating tumours derived from neuroendocrine cells with macrophage
PT stimulating protein - or its nucleic acid, also for preventing
PT development of these tumours, specifically small cell lung carcinoma.
XX
PS Example 2; Page 71; 100pp; English.
XX
CC AAV72085-V72099 represent PCR primers and probes used in the isolation
CC and amplification of novel human and murine macrophage stimulating
CC protein, MSP, which are used in a method for the prophylactic treatment
CC of a tumour derived from neuroendocrine cells (NEC) by administration of
CC this MSP to a subject at risk, sufficient to induce apoptosis of NEC
CC expressing a RON receptor (the receptor for MSP). The method is used to
CC treat or prevent small cell lung carcinoma and apoptosis of RON-
CC expressing cells may be induced in vivo or in vitro. Screening NEC from a
CC subject for susceptibility to MSP-induced apoptosis is used to identify
CC patients who will benefit from treatment with the MSP protein. MSP is
CC already known for treating pathogen infections, for stimulating
CC thrombocyte production and megakaryocyte maturation (for treating
CC thrombocytopaenia) and for stimulating growth of cells (particularly
CC hepatocytes)
XX
SQ Sequence 21 BP; 4 A; 9 C; 2 G; 6 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.8; DB 1; Length 21;
Best Local Similarity 89.5%; Pred. No. 2.2e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 2634 GAAGGAACAGTGGGTACAG 2652
|||||| |||||||||| |
Db 20 GAAGGAGCAGTGGGTACTG 2

RESULT 200
AAS22336
ID AAS22336 standard; DNA; 21 BP.
XX
AC AAS22336;
XX
DT 24-OCT-2001 (first entry)
XX
DE Human COL9A2 PCR primer 1 for Exon 29.
XX
KW Human; collagen; COL1A1; COL1A2; COL9A1; COL9A2; COL9A3; ss;
KW osteoporosis; multiple epiphyseal dysplasia; osteogenesis imperfecta;
KW shortness of stature; low bone density; gene therapy; PCR primer.
XX
OS Homo sapiens.
XX
PN US6265157-B1.
XX
PD 24-JUL-2001.
XX
PF 03-OCT-1997; 97US-00943731.
XX
PR 03-DEC-1991; 91US-00803628.
PR 13-MAR-1994; 94US-00212322.

XX
PA (UYAL-) UNIV ALLEGHENY HEALTH SCI.
PA (UYJE-) UNIV JEFFERSON THOMAS.
PA (UYOU-) UNIV OULU.
XX
PI Prockop DJ, Spotila LD, Deltas CD, Sereda L;
PI Westerhausen Larson A, Pack M, Colige A, Early J, Koerkkoe J;
PI Ala-Kokko L, Annunen S, Pihlajamaa T, Vuoristo M, Paassilta P;
XX
DR WPI; 2001-432201/46.
XX
PT Detecting collagen gene alteration, useful for diagnosing osteoporosis,
PT multiple epiphyseal dysplasia, osteogenesis imperfecta, shortness of
PT stature and low bone density in humans.
XX
PS Calim 8; Fig24; 617pp; English.
XX
CC The invention relates to Detecting a collagen gene alteration associated
CC with a pathological condition in a human subject by obtaining from the
CC subject a sample nucleic acid containing a portion of at least 15
CC consecutive nucleotides of the segment of the COL1A1 gene extending in
CC the 5' to 3' direction from 78 nucleotides of intron 27 located adjacent
CC exon 28 through the 3' end of intron 51, where the portion contains an
CC intronic nucleotide and a first and second site, determining the sequence
CC of the portion and comparing the sequence of the portion with the
CC corresponding consensus sequence of the COL1A1 gene where a difference
CC between the sequence of the portion and the consensus sequence indicates
CC the presence of the collagen alteration in the subject. The method is
CC used for detecting abnormalities in a COL1 or COL9 gene is useful for
CC determining whether a subject is afflicted with pathological conditions
CC associated with an altered collagen gene such as osteoporosis, multiple
CC epiphyseal dysplasia, osteogenesis imperfecta, shortness of stature and
CC low bone density. Identification of an abnormality in a collagen gene is
CC also useful for designing a therapeutic nucleotide or gene therapy agent
CC which can be administered to the subject to correct or alleviate the
CC abnormality. The method is useful for detecting mutations in both the
CC coding and non-coding sequences of any of the COL1 or COL9 genes.
CC Therefore the method can be used to detect collagen gene alterations
CC which affect either the primary sequence of a collagen protein chain,
CC splicing of the mRNA encoding such chains or regulation of expression of
CC the genes encoding such chains. The present sequence is a PCR primer
CC which amplifies a nucleic acid from a collagen gene of the invention
XX
SQ Sequence 21 BP; 6 A; 8 C; 3 G; 4 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.8; DB 1; Length 21;
Best Local Similarity 89.5%; Pred. No. 2.2e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1921 AACACCAGAGTTTCCTGCA 1939
||||||||||| |||| ||
Db 1 AACACCAGAGTCTCCTCCA 19

RESULT 201
ADH49192/c
ID ADH49192 standard; DNA; 21 BP.
XX
AC ADH49192;
XX
DT 25-MAR-2004 (first entry)
XX
DE NOV72 PCR primer, SEQ ID 476.
XX
KW Human; NOVX; atherosclerosis; hypertension; obesity; cancer; cytostatic;
KW hypotensive; antiarteriosclerotic; anorectic; gene therapy; NOV72; PCR;
KW primer; ss.
XX
OS Homo sapiens.
XX
PN WO200268652-A2.
XX
PD 06-SEP-2002.
XX
PF 26-FEB-2002; 2002WO-US005910.
XX
PR 26-FEB-2001; 2001US-0271646P.
PR 27-FEB-2001; 2001US-0271840P.
PR 28-FEB-2001; 2001US-0272404P.
PR 28-FEB-2001; 2001US-0272405P.
PR 28-FEB-2001; 2001US-0272410P.
PR 28-FEB-2001; 2001US-0272414P.
PR 02-MAR-2001; 2001US-0272787P.
PR 02-MAR-2001; 2001US-0272922P.
PR 02-MAR-2001; 2001US-0273048P.
PR 02-MAR-2001; 2001US-0273300P.
PR 16-MAR-2001; 2001US-0276401P.
PR 20-MAR-2001; 2001US-0277324P.
PR 20-MAR-2001; 2001US-0278660P.
PR 30-MAR-2001; 2001US-0280039P.
PR 30-MAR-2001; 2001US-0280234P.
PR 02-APR-2001; 2001US-0280818P.
PR 12-APR-2001; 2001US-0283443P.
PR 23-APR-2001; 2001US-0285754P.
PR 24-APR-2001; 2001US-0286096P.
PR 03-MAY-2001; 2001US-0288353P.
PR 17-MAY-2001; 2001US-0291703P.
PR 31-MAY-2001; 2001US-0294834P.
PR 20-JUN-2001; 2001US-0299695P.
PR 21-JUN-2001; 2001US-0299845P.
PR 05-JUL-2001; 2001US-0303242P.
PR 13-AUG-2001; 2001US-0311981P.
PR 16-AUG-2001; 2001US-0312858P.
PR 17-AUG-2001; 2001US-0313280P.
PR 29-AUG-2001; 2001US-0315614P.
PR 17-SEP-2001; 2001US-0322818P.
PR 25-FEB-2002; 2002US-00322818.
XX
PA (CURA-) CURAGEN CORP.
XX
PI Alsobrook JP, Anderson DW, Ballinger RA, Boldog FL, Burgess CE;
PI Casman SJ, Ellerman KE, Gangolli EA, Gerlach VL, Gilbert JA;
PI Gorman L, Guo X, Gusev VY, Kekuda R, Li L, Liu X, Malyankar UM;
PI Miller CE, Millet I, Padigaru M, Patturajan M, Pena CEA, Peyman JA;
PI Rastelli L, Shenoy SG, Shimkets RA, Smithson G, Spytek KA, Stone DJ;
PI Taupier RJ, Tchernev VT, Vernet CAM, Zerhusen BD;
XX
DR WPI; 2002-698672/75.
XX
PT New NOVX polypeptides or polynucleotides, useful for preventing or
PT treating disorders or syndromes e.g., atherosclerosis, hypertension,
PT obesity or cancer.
XX
PS Example 2; Page 855; 923pp; English.
XX
CC The present invention relates to novel human NOVX proteins, where X is
CC any number from 1 to 91 and their coding sequences (see ADH48717-
CC ADH48930). The proteins and coding sequences are useful for preventing or
CC treating disorders or syndromes e.g. atherosclerosis, hypertension,
CC obesity or cancer. The present sequence was used in an example from the
CC invention.
XX
SQ Sequence 21 BP; 2 A; 5 C; 5 G; 9 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.8; DB 1; Length 21;
Best Local Similarity 89.5%; Pred. No. 2.2e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 2626 GGAATCCAGAAGGAACAGT 2644
|||| ||| ||||||||||
Db 21 GGAAACCACAAGGAACAGT 3

RESULT 202
AAQ90158/c
ID AAQ90158 standard; DNA; 20 BP.

XX
AC AAQ90158;
XX
DT 25-MAR-2003 (revised)
DT 01-NOV-1995 (first entry)
XX
DE Pollen allergen gene primer 2.
XX
KW Japanese cedar; pollen; allergen; allergy; therapy; diagnostic;
KW desensitizer; Cryptomeria japonica; polymerase chain reaction; PCR;
KW primer; ss.
XX
OS Synthetic.
XX
PN EP655500-A1.
XX
PD 31-MAY-1995.
XX
PF 03-NOV-1994; 94EP-00308117.
XX
PR 05-NOV-1993; 93JP-00299151.
PR 20-DEC-1993; 93JP-00344596.
PR 27-DEC-1993; 93JP-00346814.
XX
PA (HAYB) HAYASHIBARA SEIBUTSU KAGAKU.
XX
PI Namba M, Torigoe K, Kurimoto M;
XX
DR WPI; 1995-195588/26.
XX
PT New Japanese cedar pollen allergen polypeptide - and DNA coding for it,
PT useful for treatment and diagnosis of cedar pollen allergy.
XX
PS Disclosure; Page 8; 41pp; English.
XX
CC The primers given in AAQ90157-58 are based on a portion of an allergen
CC purified from Japanese cedar pollen, and were used to isolate clone SC09
CC bearing a partial sequence (nt 173-240 of the sequence given in AAQ90156)
CC of the allergen gene by PCR amplification of pollen-derived cDNA.
CC (Updated on 25-MAR-2003 to correct PN field.)
XX
SQ Sequence 20 BP; 2 A; 5 C; 6 G; 5 T; 0 U; 2 Other;

Query Match 0.4%; Score 15.6; DB 1; Length 20;
Best Local Similarity 83.3%; Pred. No. 2.1e+02;
Matches 15; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

Qy 2660 TTGGCAGGAAGCAACATC 2677
:|||||:| |||||||||
Db 18 WTGGCARGCAGCAACATC 1

RESULT 203
AAT81553
ID AAT81553 standard; RNA; 17 BP.
XX
AC AAT81553;
XX
DT 14-DEC-1997 (first entry)
XX
DE Human c-myb hammerhead ribozyme target sequence (nt. position 2889).
XX
KW Enzymatic nucleic acid; hammerhead; ribozyme; cleavage; human;
KW smooth muscle cell; hyperproliferation; restenosis; cancer; c-myb;
KW coronary angioplasty; ss.
XX
OS Homo sapiens.
XX
PN WO9531541-A2.
XX
PD 23-NOV-1995.
XX
PF 18-MAY-1995; 95WO-US006368.
XX
PR 18-MAY-1994; 94US-00245466.
PR 13-JAN-1995; 95US-00373124.
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
PI Stinchcomb DT, Draper K, Mcswiggen J, Jarvis T;
XX
DR WPI; 1996-010927/01.
XX
PT New enzymatic nucleic acid molecules - cleave RNA produced by e.g. c-myb,
PT for treating restenosis or cancer.
XX
PS Claim 1; Page 78; 128pp; English.
XX
CC The present sequence represents the preferred target sequence for an
CC enzymatic nucleic acid, especially a hammerhead ribozyme, which cleaves
CC the human c-myb sequence at the base position indicated in the descriptor
CC line. The c-myb sequence was screened for optimal ribozyme target sites
CC using a computer folding algorithm, and regions of the mRNA which did not
CC form secondary folding structures and contained potential ribozyme
CC cleavage sites were identified. Ribozymes were synthesised and their
CC activities optimised by either varying the length of the binding arms or
CC by modification to prevent degradation by nucleases. The ribozymes cleave
CC the c-myb sequence and can be used to prevent smooth muscle cell
CC hyperproliferation in restenosis, especially after coronary angioplasty,
CC and in cancers
XX
SQ Sequence 17 BP; 5 A; 0 C; 0 G; 0 T; 12 U; 0 Other;

Query Match 0.4%; Score 15.4; DB 1; Length 17;
Best Local Similarity 23.5%; Pred. No. 1.7e+02;
Matches 4; Conservative 12; Mismatches 1; Indels 0; Gaps 0;

Qy 3305 TTTTTATTTTTATATAT 3321
:::::| :::|:|:|:
Db 1 UUUUUAAUUUUAUAUAU 17

RESULT 204
AAC70462
ID AAC70462 standard; DNA; 17 BP.
XX
AC AAC70462;
XX
DT 09-FEB-2001 (first entry)
XX
DE Single nucleotide polymorphism PCR primer #195.
XX
KW Single nucleotide polymorphism; SNP; human; genetic disease;
KW disease susceptibility; cardiovascular system; endocrine system;
KW neurological system; forensic testing; paternity testing; PCR primer; ss.
XX
OS Homo sapiens.
XX
PN WO200058519-A2.
XX
PD 05-OCT-2000.
XX
PF 30-MAR-2000; 2000WO-US008440.
XX
PR 31-MAR-1999; 99US-0127248P.
XX
PA (WHED) WHITEHEAD INST BIOMEDICAL RES.
PA (AFFY-) AFFYMETRIX INC.
XX
PI Altshuler D, Cargill M, Daley GQ, Ireland JS, Lander ES;
PI Lipshutz RJ, Patil N, Sklar P;
XX
DR WPI; 2000-611722/58.
XX
PT Nucleic acid selected from one of 106 genes comprising single nucleotide
PT polymorphisms, allele-specific oligonucleotides to the genes are useful

PT for phenotypic correlations, forensics, paternity testing, medicine and
PT genetic analysis.
XX
PS Claim 8; Fig 5; 214pp; English.
XX
CC The present invention is concerned with a number of human single
CC nucleotide polymorphisms (SNPs) which the inventors identified in human
CC genes. These SNPs can be used in disease diagnosis and prediction of an
CC individual's susceptibility to disease, in forensic and paternity testing
CC and in genetic mapping. In particular, the SNPs of the invention can be
CC used to diagnose susceptibility to diseases of the cardiovascular,
CC endocrine and neurological systems, such as coronary artery disease,
CC schizophrenia, cancer, autoimmune diseases, Alzheimer's and Parkinson's
CC diseases
XX
SQ Sequence 17 BP; 6 A; 7 C; 3 G; 1 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.4; DB 1; Length 17;
Best Local Similarity 94.1%; Pred. No. 1.7e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 492 ACAGGAAACCCCATCCA 508
||||||| ||||||||
Db 1 ACAGGAAGCCCCATCCA 17

RESULT 205
AAC70489
ID AAC70489 standard; DNA; 17 BP.
XX
AC AAC70489;
XX
DT 09-FEB-2001 (first entry)
XX
DE Single nucleotide polymorphism PCR primer #213.
XX
KW Single nucleotide polymorphism; SNP; human; genetic disease;
KW disease susceptibility; cardiovascular system; endocrine system;
KW neurological system; forensic testing; paternity testing; PCR primer; ss.
XX
OS Homo sapiens.
XX
PN WO200058519-A2.
XX
PD 05-OCT-2000.
XX
PF 30-MAR-2000; 2000WO-US008440.
XX
PR 31-MAR-1999; 99US-0127248P.
XX
PA (WHED) WHITEHEAD INST BIOMEDICAL RES.
PA (AFFY-) AFFYMETRIX INC.
XX
PI Altshuler D, Cargill M, Daley GQ, Ireland JS, Lander ES;
PI Lipshutz RJ, Patil N, Sklar P;
XX
DR WPI; 2000-611722/58.
XX
PT Nucleic acid selected from one of 106 genes comprising single nucleotide
PT polymorphisms, allele-specific oligonucleotides to the genes are useful
PT for phenotypic correlations, forensics, paternity testing, medicine and
PT genetic analysis.
XX
PS Claim 8; Fig 5; 214pp; English.
XX
CC The present invention is concerned with a number of human single
CC nucleotide polymorphisms (SNPs) which the inventors identified in human
CC genes. These SNPs can be used in disease diagnosis and prediction of an
CC individual's susceptibility to disease, in forensic and paternity testing
CC and in genetic mapping. In particular, the SNPs of the invention can be
CC used to diagnose susceptibility to diseases of the cardiovascular,
CC endocrine and neurological systems, such as coronary artery disease,
CC schizophrenia, cancer, autoimmune diseases, Alzheimer's and Parkinson's
CC diseases
XX
SQ Sequence 17 BP; 6 A; 7 C; 3 G; 1 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.4; DB 1; Length 17;
Best Local Similarity 94.1%; Pred. No. 1.7e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 492 ACAGGAAACCCCATCCA 508
||||||| ||||||||
Db 1 ACAGGAAGCCCCATCCA 17

RESULT 206
ACN03131
ID ACN03131 standard; RNA; 17 BP.
XX
AC ACN03131;
XX
DT 22-APR-2004 (first entry)
XX
DE WNV Inozyme substrate SEQ ID NO 3134.
XX
KW WNV; West Nile Virus; antiinflammatory; cytostatic; hepatotropic;
KW virucide; neuroprotective; antibacterial; replication; pancreatitis;
KW encephalitis; myocarditis; meningitis; infection; hepatitis;
KW liver failure; cancer; cirrhosis; Hammerhead; Inozyme; DNAzyme;
KW Amberzyme; Zinzyme; ss.
XX
OS West Nile Virus.
XX
PN WO200268637-A2.
XX
PD 06-SEP-2002.
XX
PF 19-OCT-2001; 2001WO-US048350.
XX
PR 20-OCT-2000; 2000US-0242411P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
PA (BLAT/) BLATT L.
PA (MCSW/) MCSWIGGEN J A.
XX
PI Blatt L, Mcswiggen JA;
XX
DR WPI; 2002-706994/76.
XX
PT New nucleic acid molecule that modulates replication of West Nile Virus
PT (WNV), useful for treating a condition related to WNV infection e.g.
PT pancreatitis, meningitis, hepatocellular carcinoma or cirrhosis.
XX
PS Claim 23; SEQ ID NO 3134; 495pp; English.
XX
CC The invention relates to nucleic acid molecules that modulate replication
CC of the West Nile Virus (WNV). The nucleic acid molecules are useful for
CC treating a condition related to WNV infection e.g. pancreatitis,
CC encephalitis, myocarditis, meningitis, neurologic infection, hepatitis,
CC liver failure, hepatocellular carcinoma or cirrhosis. The nucleic acid
CC molecule is selected from the group of ribozymes consisting of
CC Hammerhead, Inozyme, G-cleaver, DNAzyme, Amberzyme and Zinzyme. The
CC nucleic acid molecules further comprise at least five ribose residues, at
CC least ten 2'-O-methyl modifications, phosphorothioate linkages on at
CC least three of the 5' terminal nucleotides and a 3' end modification of a
CC 3'-3' inverted abasic moiety. Nucleic acid molecules SEQ ID NO 1 to 37080
CC are claimed; however, SEQ ID NO 2194-2206 and 17502-17514 are not given
CC in the specification. The present sequence is that of a nucleic acid
CC molecule of the invention
XX
SQ Sequence 17 BP; 4 A; 4 C; 7 G; 0 T; 2 U; 0 Other;

Query Match 0.4%; Score 15.4; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 1.7e+02;
Matches 14; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

```
Qy       3758 GACACAGATGGCTGGGA 3774
              ||||||| :|||:||||
Db          1 GACACAGCUGGCUGGGA 17
```

RESULT 207
ACN09948/c
ID ACN09948 standard; RNA; 17 BP.
XX
AC ACN09948;
XX
DT 22-APR-2004 (first entry)
XX
DE WNV minus strand Inozyme substrate SEQ ID NO 9951.
XX
KW WNV; West Nile Virus; antiinflammatory; cytostatic; hepatotropic;
KW virucide; neuroprotective; antibacterial; replication; pancreatitis;
KW encephalitis; myocarditis; meningitis; infection; hepatitis;
KW liver failure; cancer; cirrhosis; Hammerhead; Inozyme; DNAzyme;
KW Amberzyme; Zinzyme; ss.
XX
OS West Nile Virus.
XX
PN WO200268637-A2.
XX
PD 06-SEP-2002.
XX
PF 19-OCT-2001; 2001WO-US048350.
XX
PR 20-OCT-2000; 2000US-0242411P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
PA (BLAT/) BLATT L.
PA (MCSW/) MCSWIGGEN J A.
XX
PI Blatt L, Mcswiggen JA;
XX
DR WPI; 2002-706994/76.
XX
PT New nucleic acid molecule that modulates replication of West Nile Virus
PT (WNV), useful for treating a condition related to WNV infection e.g.
PT pancreatitis, meningitis, hepatocellular carcinoma or cirrhosis.
XX
PS Claim 23; SEQ ID NO 9951; 495pp; English.
XX
CC The invention relates to nucleic acid molecules that modulate replication
CC of the West Nile Virus (WNV). The nucleic acid molecules are useful for
CC treating a condition related to WNV infection e.g. pancreatitis,
CC encephalitis, myocarditis, meningitis, neurologic infection, hepatitis,
CC liver failure, hepatocellular carcinoma or cirrhosis. The nucleic acid
CC molecule is selected from the group of ribozymes consisting of
CC Hammerhead, Inozyme, G-cleaver, DNAzyme, Amberzyme and Zinzyme. The
CC nucleic acid molecules further comprise at least five ribose residues, at
CC least ten 2'-O-methyl modifications, phosphorothioate linkages on at
CC least three of the 5' terminal nucleotides and a 3' end modification of a
CC 3'-3' inverted abasic moiety. Nucleic acid molecules SEQ ID NO 1 to 37080
CC are claimed; however, SEQ ID NO 2194-2206 and 17502-17514 are not given
CC in the specification. The present sequence is that of a nucleic acid
CC molecule of the invention
XX
SQ Sequence 17 BP; 2 A; 7 C; 4 G; 0 T; 4 U; 0 Other;

  Query Match   0.4%; Score 15.4; DB 1; Length 17;
  Best Local Similarity   94.1%; Pred. No. 1.7e+02;
  Matches   16; Conservative   0; Mismatches   1; Indels   0; Gaps   0;

```
Qy       3758 GACACAGATGGCTGGGA 3774
              ||||||| |||||||||
Db         17 GACACAGCTGGCTGGGA 1
```

RESULT 208
ABT35599/c
ID ABT35599 standard; DNA; 17 BP.
XX
AC ABT35599;
XX
DT 12-JUN-2003 (first entry)
XX
DE Tumour suppression related human fukutin oligo SEQ ID No 1236.
XX
KW Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip;
KW antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease;
KW schizophrenia; protein chip; gene therapy; tumour suppression;
KW human fukutin; ds.
XX
OS Homo sapiens.
XX
PN WO2003025175-A2.
XX
PD 27-MAR-2003.
XX
PF 17-SEP-2002; 2002WO-IB004208.
XX
PR 17-SEP-2001; 2001FR-00011978.
XX
PA (MOLE-) MOLECULAR ENGINES LAB.
XX
PI Telerman A, Amson R, Tuijnder M;
XX
DR WPI; 2003-313353/30.
XX
PT New isolated nucleic acid, useful for treating viral diseases associated
PT with tumors and cell degeneration, also related polypeptides, antibodies
PT and transfected cells.
XX
PS Disclosure; Page 177; 720pp; French.
XX
CC The invention relates to a novel isolated 17 mer nucleic acid sequence,
CC given in the specification, a sequence containing at least 15 consecutive
CC nucleotides from the 17 mer sequence, a sequence with, after optimal
CC alignment, at least 80 % identity to the 17 mer sequence, a sequence that
CC hybridizes to them under highly stringent conditions, or the complement
CC of any of them, or the corresponding RNA. The novel isolated nucleic
CC acids of the invention are useful as probes and primers for detecting,
CC identifying, quantifying and/or amplifying a nucleic acid, e.g. as one
CC component of a gene chip, in vitro as (anti)sense reagents, and for
CC production of recombinant polypeptides. Any of the nucleic acids,
CC polypeptides, vectors containing the nucleic acids, cells containing the
CC vector or antibodies directed against the polypeptides are useful for
CC preparation of pharmaceuticals for prevention and/or treatment of viral
CC diseases that are characterised by development of tumours or cell
CC degeneration, specifically cancer but also Alzheimer's disease and
CC schizophrenia. Analysis of the expression of the 17 mer nucleic acids in
CC patient samples is useful for diagnosis and/or prognosis of these
CC diseases. The polypeptides can also be used to generate antibodies, and
CC both the polypeptide and antibodies are useful as components of protein
CC chips. The nucleic acid sequences of the invention can be used in gene
CC therapy. This polynucleotide sequence represents a tumour suppression
CC related human fukutin oligonucleotide of the invention
XX
SQ Sequence 17 BP; 6 A; 4 C; 1 G; 6 T; 0 U; 0 Other;

  Query Match   0.4%; Score 15.4; DB 1; Length 17;
  Best Local Similarity   94.1%; Pred. No. 1.7e+02;
  Matches   16; Conservative   0; Mismatches   1; Indels   0; Gaps   0;

```
Qy       2411 TGAATATGAGATTGCTC 2427
              ||||||||||||||| ||
Db         17 TGAATATGAGATTGATC 1
```

RESULT 209
ACD54465
ID ACD54465 standard; RNA; 17 BP.

```
XX
AC   ACD54465;
XX
DT   24-SEP-2003  (first entry)
XX
DE   HBV DNAzyme substrate sequence #24.
XX
KW   Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;
KW   RNA stability; RNA expression; RNA synthesis; antisense;
KW   enzymatic nucleic acid; hammerhead ribozyme; DNAzyme; inozyme; zinzyme;
KW   amberzyme; G-cleaver ribozyme; decoy molecule; aptamer;
KW   HBV reverse transcriptase; Enhancer I region; viral replication;
KW   degenerative; disease state; HBV infection; HCV infection; cirrhosis;
KW   liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;
KW   virucide; antiinflammatory; substrate; ss.
XX
OS   Hepatitis B virus.
XX
PN   WO200281494-A1.
XX
PD   17-OCT-2002.
XX
PF   26-MAR-2002; 2002WO-US009187.
XX
PR   26-MAR-2001; 2001US-00817879.
PR   08-JUN-2001; 2001US-00877478.
PR   08-JUN-2001; 2001US-0296876P.
PR   24-OCT-2001; 2001US-0335059P.
PR   05-DEC-2001; 2001US-0337055P.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
PA   (BLAT/) BLATT L.
PA   (MACE/) MACEJAK D.
PA   (MCSW/) MCSWIGGEN J.
PA   (MORR/) MORRISSEY D.
PA   (PAVC/) PAVCO P.
PA   (LEEP/) LEE P.
PA   (DRAP/) DRAPER K.
PA   (ROBE/) ROBERTS E.
XX
PI   Blatt L,  Macejak D,  Mcswiggen J,  Morrissey D,  Pavco P,  Lee P;
PI   Draper K,  Roberts E;
XX
DR   WPI; 2003-229207/22.
XX
PT   Novel compound useful for treating cirrhosis, liver failure,
PT   hepatocellular carcinoma, or condition associated with hepatitis C virus
PT   infection.
XX
PS   Example 1; Page 184; 387pp; English.
XX
CC   The present invention relates to nucleic acid molecules which modulate
CC   the synthesis, expression and/or stability of Hepatitis C virus (HCV) or
CC   Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense
CC   and enzymatic nucleic acids such as hammerhead ribozymes, DNAzymes,
CC   inozymes, zinzymes, amberzymes, and G-cleaver ribozymes. Also disclosed
CC   are nucleic acid decoy molecules and aptamers that bind to HBV reverse
CC   transcriptase and/or HBV reverse transcriptase primer sequences, as well
CC   as oligonucleotides that specifically bind the Enhancer I region of HBV
CC   DNA. The nucleic acids may be used to modulate the expression of HBV
CC   genes and HBV viral replication. Also disclosed is a method for screening
CC   compounds and/or potential therapies directed against HBV, and compounds
CC   that modulate the expression and/or replication of HCV. The compounds and
CC   methods of the invention are useful for the treatment of degenerative and
CC   disease states related to HBV and HCV infection, replication and gene
CC   expression such as cirrhosis, liver failure, and hepatocellular
CC   carcinoma. The present sequence represents a substrate for one of the HBV
CC   ribozyme, inozyme, G-cleaver, zinzyme, DNAzyme or amberzyme sequences
CC   disclosed in the present invention
XX
SQ   Sequence 17 BP; 4 A; 4 C; 3 G; 0 T; 6 U; 0 Other;

  Query Match          0.4%;  Score 15.4;  DB 1;  Length 17;
  Best Local Similarity   58.8%;  Pred. No. 1.7e+02;
  Matches   10;  Conservative    6;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        528 TTTTCTGGACTATCAAG 544
              : ::|:||||:|:||||
Db          1 UCUUCUGGACUAUCAAG 17


RESULT 210
ACD51886
ID   ACD51886 standard; RNA; 17 BP.
XX
AC   ACD51886;
XX
DT   24-SEP-2003  (first entry)
XX
DE   HBV inozyme substrate sequence #118.
XX
KW   Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;
KW   RNA stability; RNA expression; RNA synthesis; antisense;
KW   enzymatic nucleic acid; hammerhead ribozyme; DNAzyme; inozyme; zinzyme;
KW   amberzyme; G-cleaver ribozyme; decoy molecule; aptamer;
KW   HBV reverse transcriptase; Enhancer I region; viral replication;
KW   degenerative; disease state; HBV infection; HCV infection; cirrhosis;
KW   liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;
KW   virucide; antiinflammatory; substrate; ss.
XX
OS   Hepatitis B virus.
XX
PN   WO200281494-A1.
XX
PD   17-OCT-2002.
XX
PF   26-MAR-2002; 2002WO-US009187.
XX
PR   26-MAR-2001; 2001US-00817879.
PR   08-JUN-2001; 2001US-00877478.
PR   08-JUN-2001; 2001US-0296876P.
PR   24-OCT-2001; 2001US-0335059P.
PR   05-DEC-2001; 2001US-0337055P.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
PA   (BLAT/) BLATT L.
PA   (MACE/) MACEJAK D.
PA   (MCSW/) MCSWIGGEN J.
PA   (MORR/) MORRISSEY D.
PA   (PAVC/) PAVCO P.
PA   (LEEP/) LEE P.
PA   (DRAP/) DRAPER K.
PA   (ROBE/) ROBERTS E.
XX
PI   Blatt L,  Macejak D,  Mcswiggen J,  Morrissey D,  Pavco P,  Lee P;
PI   Draper K,  Roberts E;
XX
DR   WPI; 2003-229207/22.
XX
PT   Novel compound useful for treating cirrhosis, liver failure,
PT   hepatocellular carcinoma, or condition associated with hepatitis C virus
PT   infection.
XX
PS   Example 1; Page 152; 387pp; English.
XX
CC   The present invention relates to nucleic acid molecules which modulate
CC   the synthesis, expression and/or stability of Hepatitis C virus (HCV) or
CC   Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense
CC   and enzymatic nucleic acids such as hammerhead ribozymes, DNAzymes,
CC   inozymes, zinzymes, amberzymes, and G-cleaver ribozymes. Also disclosed
CC   are nucleic acid decoy molecules and aptamers that bind to HBV reverse
CC   transcriptase and/or HBV reverse transcriptase primer sequences, as well
CC   as oligonucleotides that specifically bind the Enhancer I region of HBV
CC   DNA. The nucleic acids may be used to modulate the expression of HBV
CC   genes and HBV viral replication. Also disclosed is a method for screening
CC   compounds and/or potential therapies directed against HBV, and compounds
```

CC that modulate the expression and/or replication of HCV. The compounds and
CC methods of the invention are useful for the treatment of degenerative and
CC disease states related to HBV and HCV infection, replication and gene
CC expression such as cirrhosis, liver failure, and hepatocellular
CC carcinoma. The present sequence represents a substrate for one of the HBV
CC ribozyme, inozyme, G-cleaver, zinzyme, DNAzyme or amberzyme sequences
CC disclosed in the present invention
XX
SQ Sequence 17 BP; 4 A; 3 C; 4 G; 0 T; 6 U; 0 Other;

Query Match 0.4%; Score 15.4; DB 1; Length 17;
Best Local Similarity 58.8%; Pred. No. 1.7e+02;
Matches 10; Conservative 6; Mismatches 1; Indels 0; Gaps 0;

Qy 530 TTCTGGACTATCAAGTT 546
::|:||||:|:|||| :
Db 1 UUCUGGACUAUCAAGGU 17

RESULT 211
ADM58685
ID ADM58685 standard; RNA; 17 BP.
XX
AC ADM58685;
XX
DT 03-JUN-2004 (first entry)
XX
DE Hepatitis B virus (HBV) RNA target sequence #819.
XX
KW Hepatitis B virus; HBV; ss; enzymatic nucleic acid; RNA cleavage;
KW hepatitis B virus infection; hepatitis; hepatocellular carcinoma;
KW cirrhosis; liver failure; lamivudine; interferon; genetic drift;
KW virucide; hepatotropic; antiinflammatory; cytostatic.
XX
OS Hepatitis B virus.
XX
PN US2004054156-A1.
XX
PD 18-MAR-2004.
XX
PF 15-JAN-2003; 2003US-00342902.
XX
PR 14-MAY-1992; 92US-00882712.
PR 07-FEB-1994; 94US-00193627.
PR 08-NOV-1999; 99US-00436430.
PR 20-MAR-2000; 2000US-00531025.
PR 09-AUG-2000; 2000US-00636385.
PR 24-OCT-2000; 2000US-00696347.
PR 08-JUN-2001; 2001US-00877478.
XX
PA (DRAP/) DRAPER K.
PA (BLAT/) BLATT L.
PA (MCSW/) MCSWIGGEN J A.
PA (MORR/) MORRISSEY D.
XX
PI Draper K, Blatt L, Mcswiggen JA, Morrissey D;
XX
DR WPI; 2004-247781/23.
XX
PT Novel enzymatic nucleic acid molecule such as DNAzymes and inozymes
PT specifically cleaving RNA derived from hepatitis B virus and comprising
PT one or more binding arms, useful for treating hepatitis and cirrhosis.
XX
PS Disclosure; SEQ ID NO 819; 122pp; English.
XX
CC The invention relates to an enzymatic nucleic acid molecule that
CC specifically cleaves RNA derived from hepatitis B virus (HBV) and
CC comprising one or more binding arms, without requiring the presence of a
CC 2'-OH group within the molecule for activity. The nucleic acids are
CC useful for treating hepatitis B virus infection, hepatitis,
CC hepatocellular carcinoma, cirrhosis and liver failure, either alone or in
CC combination with other therapies such as lamivudine and interferons. The
CC nucleic acids are useful as diagnostic tools to examine genetic drift and
CC mutations within diseased cells, for detecting the presence of HBV RNA in
CC a cell, for the study of RNA and for down-regulating gene expression of
CC target genes in bacterial, fungal, viral, plant or mammalian cells. This
CC sequence represents an HBV RNA target sequence, used in the scope of the
CC invention. Note: The sequence data for this patent is also available in
CC electronic format from USPTO at seqdata.uspto.gov/sequence.html.
XX
SQ Sequence 17 BP; 4 A; 3 C; 4 G; 0 T; 6 U; 0 Other;

Query Match 0.4%; Score 15.4; DB 1; Length 17;
Best Local Similarity 58.8%; Pred. No. 1.7e+02;
Matches 10; Conservative 6; Mismatches 1; Indels 0; Gaps 0;

Qy 530 TTCTGGACTATCAAGTT 546
::|:||||:|:|||| :
Db 1 UUCUGGACUAUCAAGGU 17

RESULT 212
ADM59738
ID ADM59738 standard; RNA; 17 BP.
XX
AC ADM59738;
XX
DT 03-JUN-2004 (first entry)
XX
DE Hepatitis B virus (HBV) RNA target sequence #1872.
XX
KW Hepatitis B virus; HBV; ss; enzymatic nucleic acid; RNA cleavage;
KW hepatitis B virus infection; hepatitis; hepatocellular carcinoma;
KW cirrhosis; liver failure; lamivudine; interferon; genetic drift;
KW virucide; hepatotropic; antiinflammatory; cytostatic.
XX
OS Hepatitis B virus.
XX
PN US2004054156-A1.
XX
PD 18-MAR-2004.
XX
PF 15-JAN-2003; 2003US-00342902.
XX
PR 14-MAY-1992; 92US-00882712.
PR 07-FEB-1994; 94US-00193627.
PR 08-NOV-1999; 99US-00436430.
PR 20-MAR-2000; 2000US-00531025.
PR 09-AUG-2000; 2000US-00636385.
PR 24-OCT-2000; 2000US-00696347.
PR 08-JUN-2001; 2001US-00877478.
XX
PA (DRAP/) DRAPER K.
PA (BLAT/) BLATT L.
PA (MCSW/) MCSWIGGEN J A.
PA (MORR/) MORRISSEY D.
XX
PI Draper K, Blatt L, Mcswiggen JA, Morrissey D;
XX
DR WPI; 2004-247781/23.
XX
PT Novel enzymatic nucleic acid molecule such as DNAzymes and inozymes
PT specifically cleaving RNA derived from hepatitis B virus and comprising
PT one or more binding arms, useful for treating hepatitis and cirrhosis.
XX
PS Disclosure; SEQ ID NO 1872; 122pp; English.
XX
CC The invention relates to an enzymatic nucleic acid molecule that
CC specifically cleaves RNA derived from hepatitis B virus (HBV) and
CC comprising one or more binding arms, without requiring the presence of a
CC 2'-OH group within the molecule for activity. The nucleic acids are
CC useful for treating hepatitis B virus infection, hepatitis,
CC hepatocellular carcinoma, cirrhosis and liver failure, either alone or in
CC combination with other therapies such as lamivudine and interferons. The
CC nucleic acids are useful as diagnostic tools to examine genetic drift and
CC mutations within diseased cells, for detecting the presence of HBV RNA in

```
CC   a cell, for the study of RNA and for down-regulating gene expression of
CC   target genes in bacterial, fungal, viral, plant or mammalian cells. This
CC   sequence represents an HBV RNA target sequence, used in the scope of the
CC   invention. Note: The sequence data for this patent is also available in
CC   electronic format from USPTO at seqdata.uspto.gov/sequence.html.
XX
SQ   Sequence 17 BP; 4 A; 4 C; 3 G; 0 T; 6 U; 0 Other;

  Query Match             0.4%;  Score 15.4;  DB 1;  Length 17;
  Best Local Similarity   58.8%;  Pred. No. 1.7e+02;
  Matches   10;  Conservative    6;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        528 TTTTCTGGACTATCAAG 544
              : ::|:||||:|:||||
Db          1 UCUUCUGGACUAUCAAG 17


RESULT 213
AAT56721/c
ID   AAT56721 standard; RNA; 18 BP.
XX
AC   AAT56721;
XX
DT   25-MAR-2003  (revised)
DT   02-APR-1997  (first entry)
XX
DE   Human TNF-alpha hairpin ribozyme target sequence (nt position 1178).
XX
KW   Enzymatic nucleic acid; ribozyme; trans cleavage; inhibition;
KW   gene expression; downregulation; interleukin-5; IL-5; ICAM-1;
KW   intercellular adhesion molecule; rel A; tumour necrosis factor;
KW   TNF-alpha; respiratory syncytial virus; RSV; bcr-abl; oncogene;
KW   translocation; chronic myelogenous leukaemia; CML; cancer;
KW   Philadelphia chromosome; inflammation; autoimmune disease;
KW   atherosclerosis; myocardial infarction; stroke; restenosis;
KW   transplant rejection; rheumatoid arthritis; psoriasis;
KW   myocardial ischaemia; Kawasaki disease; septic shock; HIV;
KW   human immunodeficiency virus; acquired immune deficiency syndrome; AIDS;
KW   ss.
XX
OS   Homo sapiens.
XX
PN   WO9523225-A2.
XX
PD   31-AUG-1995.
XX
PF   23-FEB-1995;   95WO-IB000156.
XX
PR   23-FEB-1994;   94US-00201109.
PR   29-MAR-1994;   94US-00218934.
PR   04-APR-1994;   94US-00222795.
PR   07-APR-1994;   94US-00224483.
PR   15-APR-1994;   94US-00227958.
PR   15-APR-1994;   94US-00228041.
PR   18-MAY-1994;   94US-00245736.
PR   06-JUL-1994;   94US-00271280.
PR   15-AUG-1994;   94US-00291932.
PR   16-AUG-1994;   94US-00291433.
PR   17-AUG-1994;   94US-00292620.
PR   19-AUG-1994;   94US-00293520.
PR   02-SEP-1994;   94US-00300000.
PR   08-SEP-1994;   94US-00303039.
PR   23-SEP-1994;   94US-00311486.
PR   23-SEP-1994;   94US-00311749.
PR   28-SEP-1994;   94US-00314397.
PR   03-OCT-1994;   94US-00316771.
PR   07-OCT-1994;   94US-00319492.
PR   11-OCT-1994;   94US-00321993.
PR   04-NOV-1994;   94US-00334847.
PR   10-NOV-1994;   94US-00337608.
PR   28-NOV-1994;   94US-00345516.
PR   16-DEC-1994;   94US-00357577.
PR   23-DEC-1994;   94US-00363233.
PR   30-JAN-1995;   95US-00380734.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
XX
PI   Stinchcomb DT, Chowrira B, Direnzo A, Draper KG, Dudycz LW;
PI   Grimm S, Karpeisky A, Kisich K, Matulic-Adamic J, Mcswiggen JA;
PI   Modak A, Pavco P, Beigleman L, Sullivan SM, Sweedler D, Thompson JD;
PI   Tracz D, Usman N, Wincott FE, Woolf T;
XX
DR   WPI; 1995-351090/45.
XX
PT   Ribozymes having modified bases and methods for producing them - for use
PT   in inhibiting disease related genes.
XX
PS   Claim 2; Page 259; 407pp; English.
XX
CC   The present sequence represents a preferred target sequence for an
CC   enzymatic nucleic acid (i.e. a ribozyme) which cleaves TNF-alpha mRNA at
CC   the nucleotide base position indicated in the DE line. Regions of the
CC   mRNA that do not form secondary folding structures and that contain
CC   potential hammerhead and hairpin ribozyme cleavage sites were identified
CC   by computer analysis. Ribozymes directed against these mRNA sequences
CC   were designed and synthesised with modifications that improve their
CC   nuclease resistance. The ribozymes are designed to cleave the target
CC   sequences and thereby inhibit TNF-alpha expression, making them
CC   potentially useful for treating rheumatoid arthritis, septic shock and
CC   other inflammatory disorders including psoriasis, as well as for
CC   treatment of AIDS. (Updated on 25-MAR-2003 to correct PI field.)
XX
SQ   Sequence 18 BP; 3 A; 5 C; 3 G; 0 T; 7 U; 0 Other;

  Query Match             0.4%;  Score 15.4;  DB 1;  Length 18;
  Best Local Similarity   94.1%;  Pred. No. 1.9e+02;
  Matches   16;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       3416 TCAAGGAAGTATGGAAA 3432
              |||||||||| ||||||
Db         18 TCAAGGAAGTCTGGAAA 2


RESULT 214
AAT61999
ID   AAT61999 standard; DNA; 18 BP.
XX
AC   AAT61999;
XX
DT   08-DEC-1997  (first entry)
XX
DE   Probe 3 for Auxis thazard detection.
XX
KW   detection; nucleic acid; aqueous solution; length analysis; repeat unit;
KW   microsatellite marker; repetitive element; microorganism; probe;
KW   genotyping; clinical diagnosis; quantification; sequencing; mutation; ss.
XX
OS   Synthetic.
XX
PN   DE19533354-A1.
XX
PD   13-MAR-1997.
XX
PF   08-SEP-1995;   95DE-01033354.
XX
PR   08-SEP-1995;   95DE-01033354.
XX
PA   (OZKA/) OZKAN D.
XX
PI   Ozkan D;
XX
DR   WPI; 1997-166755/16.
XX
PT   Nucleic acid assay - involving interlinking circular nucleic acid
PT   molecules.
XX
```

PS Example 3; Page 7; 10pp; German.
XX
CC A new method for detection of nucleic acids in aqueous solution is
CC claimed, which may be used for length analysis of repeat unit containing
CC sections of microsatellite markers or other repetitive elements. The
CC method may also be used for microorganism detection, parallel detection
CC of several target nucleic acids using several primer pairs for enzymatic
CC amplification and/or several differently labelled detection probes and/or
CC 2nd probes, genotype determination, determining relatedness of organisms,
CC clinical diagnosis, food chemistry, anthropology, forensic analysis,
CC specific quantification of nucleic acids, determining the RNA
CC concentration of tumour markers, determining nucleic acid sequences for
CC antigenic determinants, nucleic acid sequence analysis, mutation analysis
CC and determining genetic changes involved in the development of drug
CC resistance. AAT61997-62000 are species specific probes for detection of
CC Auxis thazard using the new method
XX
SQ Sequence 18 BP; 3 A; 4 C; 5 G; 6 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.4; DB 1; Length 18;
Best Local Similarity 94.1%; Pred. No. 1.9e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 3125 TGATGACTGCAGTCGTC 3141
||||||||||| |||||
Db 1 TGATGACTGCATTCGTC 17

RESULT 215
AAS11810
ID AAS11810 standard; DNA; 18 BP.
XX
AC AAS11810;
XX
DT 24-OCT-2001 (first entry)
XX
DE Human surfactant protein B, SPB, probe 5'SPB-f1.
XX
KW Human; surfactant protein B; SPB; Thyroid transcription factor; TTF-1;
KW lung cancer; thyroid cancer; 5'SPB-f1; ss; probe; HNF-3; EMSA;
KW electrophoretic mobility shift assay.
XX
OS Homo sapiens.
XX
PN US2001016352-A1.
XX
PD 23-AUG-2001.
XX
PF 26-MAY-1999; 99US-00320337.
XX
PR 18-MAY-1994; 94US-00245356.
PR 17-MAY-1995; 95US-00442809.
XX
PA (BOHI/) BOHINSKI R J.
PA (WHIT/) WHITSETT J A.
XX
PI Bohinski RJ, Whitsett JA;
XX
DR WPI; 2001-513959/56.
XX
PT Oligonucleotide sequences which bind nuclear proteins and surfactants
PT found in lung cells, useful for detecting cancers that originate in the
PT lung.
XX
PS Example 2; Fig 10a; 76pp; English.
XX
CC The invention relates to an oligonucleotide which includes at least 1
CC nucleic acid sequence which binds to at least 1 nuclear protein found in
CC lung cells (e.g. the thyroid transcription factor 1, TTF-1, protein). The
CC oligonucleotide can be expressed in lung cells via a vector and can be
CC used to target therapeutic agents to kill lung or thyroid cancer cells.
CC The oligonucleotide can be used to detect or diagnose lung or thyroid
CC cancer. The oligonucleotides may be designed from the sequences of, for
CC example, the promoters of lung-specific genes such as those encoding
CC surfactant proteins. The present sequence is a Human surfactant protein
CC B, SPB, probe 5'SPB-f1 and is used to identify TTF-1 and HNF-3 binding
CC sites in the SPB promoter using EMSA, electrophoretic mobility shift
CC assay
XX
SQ Sequence 18 BP; 2 A; 6 C; 5 G; 5 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.4; DB 1; Length 18;
Best Local Similarity 94.1%; Pred. No. 1.9e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1798 CCCTCCAGGTTCTTGAT 1814
||||||||||| ||||||
Db 2 CCCTCCAGGTGCTTGAT 18

RESULT 216
AAS11808/c
ID AAS11808 standard; DNA; 18 BP.
XX
AC AAS11808;
XX
DT 24-OCT-2001 (first entry)
XX
DE Human surfactant protein B, SPB, probe 5'f1.
XX
KW Human; surfactant protein B; SPB; Thyroid transcription factor; TTF-1;
KW lung cancer; thyroid cancer; 5'f1; ds; probe; HNF-3; EMSA;
KW electrophoretic mobility shift assay.
XX
OS Homo sapiens.
XX
PN US2001016352-A1.
XX
PD 23-AUG-2001.
XX
PF 26-MAY-1999; 99US-00320337.
XX
PR 18-MAY-1994; 94US-00245356.
PR 17-MAY-1995; 95US-00442809.
XX
PA (BOHI/) BOHINSKI R J.
PA (WHIT/) WHITSETT J A.
XX
PI Bohinski RJ, Whitsett JA;
XX
DR WPI; 2001-513959/56.
XX
PT Oligonucleotide sequences which bind nuclear proteins and surfactants
PT found in lung cells, useful for detecting cancers that originate in the
PT lung.
XX
PS Example 2; Fig 9a; 76pp; English.
XX
CC The invention relates to an oligonucleotide which includes at least 1
CC nucleic acid sequence which binds to at least 1 nuclear protein found in
CC lung cells (e.g. the thyroid transcription factor 1, TTF-1, protein). The
CC oligonucleotide can be expressed in lung cells via a vector and can be
CC used to target therapeutic agents to kill lung or thyroid cancer cells.
CC The oligonucleotide can be used to detect or diagnose lung or thyroid
CC cancer. The oligonucleotides may be designed from the sequences of, for
CC example, the promoters of lung-specific genes such as those encoding
CC surfactant proteins. The present sequence is a Human surfactant protein
CC B, SPB, probe 5'f1 based on the SPB-f1 probe and is used to identify TTF-
CC 1 and HNF-3 binding sites in the SPB promoter using EMSA, electrophoretic
CC mobility shift assay
XX
SQ Sequence 18 BP; 5 A; 5 C; 6 G; 2 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.4; DB 1; Length 18;
Best Local Similarity 94.1%; Pred. No. 1.9e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

```
Qy       1798 CCCTCCAGGTTCTTGAT 1814
              ||||||||||  ||||||
Db         17 CCCTCCAGGTGCTTGAT 1

RESULT 217
ABL95898/c
ID   ABL95898 standard; DNA; 18 BP.
XX
AC   ABL95898;
XX
DT   19-JUN-2002  (first entry)
XX
DE   Probe d for assaying nucleic acids.
XX
KW   Probe; polymorphism detection; mutation detection; disease diagnosis;
KW   microbial identification; ss.
XX
OS   Unidentified.
XX
PN   WO200208414-A1.
XX
PD   31-JAN-2002.
XX
PF   27-JUN-2001; 2001WO-IB001147.
XX
PR   27-JUN-2000; 2000JP-00193133.
PR   03-AUG-2000; 2000JP-00236115.
PR   26-SEP-2000; 2000JP-00292483.
XX
PA   (NAAD-) NAT INST ADVANCED IND SCI & TECHNOLOGY.
PA   (KANK-) KANKYO ENG CO LTD.
XX
PI   Kurane R,  Kanagawa T,  Kamagata Y,  Torimura M,  Kurata S,  Yamada K;
PI   Yokomaku T;
XX
DR   WPI; 2002-195876/25.
XX
PT   Fluorescently-labeled nucleic acid probes for assaying nucleic acids and
PT   their polymorphism and mutation, particularly useful in science and
PT   medicine for e.g. analytical applications, disease diagnosis and
PT   microbial identification.
XX
PS   Example 12; Page 60; 152pp; Japanese.
XX
CC   The present invention relates to nucleic acid probes, which are useful
CC   for assaying nucleic acids by hybridising with a target nucleic acid, in
CC   which a single-stranded oligonucleotide is labelled with a fluorescent
CC   substance and a quencher in a manner that the fluorescence intensity of
CC   the hybridisation reaction system is increased after completion of the
CC   hybridisation but no stem loop structure is formed. The probes are useful
CC   for assaying nucleic acids and their polymorphism and mutation,
CC   particularly useful for e.g. analytical applications, disease diagnosis
CC   and microbial identification. The present sequence was used to illustrate
CC   the invention
XX
SQ   Sequence 18 BP; 14 A; 0 C; 0 G; 4 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 15.4;  DB 1;  Length 18;
  Best Local Similarity   94.1%;  Pred. No. 1.9e+02;
  Matches   16;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       3305 TTTTTATTTTTATATAT 3321
              |||||  ||||||||||
Db         18 TTTTTTTTTTTATATAT 2


RESULT 218
ADG73198
ID   ADG73198 standard; DNA; 18 BP.
XX
AC   ADG73198;
XX
DT   11-MAR-2004  (first entry)
XX
DE   Pseudomonas syringae pv. tomato DC3000 Hop gene PCR primer #45.
XX
KW   Avr; Hop; transgenic plant; disease resistance; cancer; bacteria;
KW   metabolic pathway; eukaryotic cell death; programmed cell death;
KW   cytostatic; PCR; primer; ss.
XX
OS   Pseudomonas syringae; pv. tomato str. DC3000.
XX
PN   US2003204868-A1.
XX
PD   30-OCT-2003.
XX
PF   12-FEB-2003; 2003US-00365742.
XX
PR   12-FEB-2002; 2002US-0356408P.
PR   10-MAY-2002; 2002US-0380185P.
XX
PA   (COLL/) COLLMER A.
PA   (ALFA/) ALFANO J R.
PA   (CART/) CARTINHOUR S W.
PA   (SCHN/) SCHNEIDER D J.
PA   (TANG/) TANG X.
XX
PI   Collmer A,  Alfano JR,  Cartinhour SW,  Schneider DJ,  Tang X;
XX
DR   WPI; 2003-875735/81.
XX
PT   New nucleic acid, useful in imparting disease resistance to a plant or in
PT   preparing a composition for treating cancer.
XX
PS   Example; SEQ ID NO 192; 209pp; English.
XX
CC   The present invention relates to the isolation of Pseudomonas syringae
CC   pv. tomato DC3000 Avr/Hop proteins, and the polynucleotide sequences
CC   encoding them. Also disclosed are expression vectors, host cells, and
CC   transgenic plants comprising polynucleotide sequences of the invention.
CC   The polynucleotide and polypeptide sequences are useful in imparting
CC   disease resistance to a plant or in preparing a composition for treating
CC   cancer. The sequences may also be used to make a plant hypersusceptible
CC   to colonisation by nonpathogenic bacteria, modify a metabolic pathway in
CC   a cell, cause eukaryotic cell death, and inhibit programmed cell death.
CC   The present sequence represents a PCR primer used in the examples of the
CC   present invention.
XX
SQ   Sequence 18 BP; 5 A; 7 C; 2 G; 4 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 15.4;  DB 1;  Length 18;
  Best Local Similarity   94.1%;  Pred. No. 1.9e+02;
  Matches   16;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       2896 GCATTTCAACCAACTCA 2912
              ||||||||||| ||||
Db          2 GCATTTCAACCAGCTCA 18


RESULT 219
ADL12254
ID   ADL12254 standard; DNA; 18 BP.
XX
AC   ADL12254;
XX
DT   06-MAY-2004  (first entry)
XX
DE   Pseudomonas syringae anti-cancer gene primer #65.
XX
KW   cytostatic; gene therapy; Avr; Hop; cancer; primer; ss.
XX
OS   Pseudomonas syringae; pv tomato DC3000.
XX
PN   WO2003068930-A2.
```

```
XX
PD   21-AUG-2003.
XX
PF   12-FEB-2003; 2003WO-US004450.
XX
PR   12-FEB-2002; 2002US-0356408P.
PR   10-MAY-2002; 2002US-0380185P.
XX
PA   (CORR ) CORNELL RES FOUND INC.
PA   (USDA ) US SEC OF AGRIC.
PA   (UYNE-) UNIV NEBRASKA.
PA   (UNIV ) UNIV KANSAS STATE RES FOUND.
XX
PI   Collmer A,  Alfano JR,  Cartinhour SW,  Schneider DJ,  Tang X;
XX
DR   WPI; 2003-679632/64.
XX
PT   New nucleic acid molecule, useful for preparing a composition for
PT   treating cancer.
XX
PS   Disclosure; SEQ ID NO 192; 284pp; English.
XX
CC   The invention relates to novel Pseudomonas Avr and Hop genes, a sequence
CC   that hybridizes with these sequences under stringency conditions
CC   comprising a hybridization medium that includes 0.9 x saline sodium
CC   citrate (SSC) buffer at a temperature of 42 deg C. The nucleic acid
CC   molecule is useful for preparing a composition for treating cancer. This
CC   sequence corresponds to a PCR to isolate and amplify one of the genes of
CC   the invention.
XX
SQ   Sequence 18 BP; 5 A; 7 C; 2 G; 4 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 15.4;  DB 1;  Length 18;
  Best Local Similarity   94.1%;  Pred. No. 1.9e+02;
  Matches   16;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       2896 GCATTTCAACCAACTCA 2912
              ||||||||||||| ||||
Db          2 GCATTTCAACCAGCTCA 18


RESULT 220
ABA97625/c
ID   ABA97625 standard; DNA; 19 BP.
XX
AC   ABA97625;
XX
DT   11-APR-2002  (first entry)
XX
DE   Probe d.
XX
KW   ss; fluorochrome; nucleic acid probe; fluorescence.
XX
OS   Unidentified.
XX
PN   JP2001286300-A.
XX
PD   16-OCT-2001.
XX
PF   20-APR-2000; 2000JP-00120097.
XX
PR   20-APR-1999;   99JP-00111601.
PR   24-AUG-1999;   99JP-00236666.
PR   30-AUG-1999;   99JP-00242693.
PR   01-FEB-2000; 2000JP-00028896.
XX
PA   (BIOI-) BIOINDUSTRY KYOKAI SH.
PA   (KANK-) KANKYO ENG KK.
PA   (KEIZ-) KEIZAI SANGYOSHO SANGYO GIJUTSU SOGO KEN.
XX
DR   WPI; 2002-134193/18.
XX
PT   Measurement of nucleic acids, using a nucleic acid probe and analysis of
PT   the obtained data.
XX
PS   Example 5; Page 17; 34pp; Japanese.
XX
CC   This invention relates to a method for measuring nucleic acids using a
CC   nucleic acid probe labelled with a fluorochrome. The nucleic acid probe
CC   decreases the fluorescence of the fluorochrome when hybridised with a
CC   target nucleic acid, the decrease in the fluorescence is measured. The
CC   method can be used for measuring a target nucleic acid
XX
SQ   Sequence 19 BP; 15 A; 0 C; 0 G; 4 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 15.4;  DB 1;  Length 19;
  Best Local Similarity   94.1%;  Pred. No. 2e+02;
  Matches   16;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       3305 TTTTTATTTTTATATAT 3321
              ||||| |||||||||||
Db         18 TTTTTTTTTTTTATATAT 2


RESULT 221
AAQ41846/c
ID   AAQ41846 standard; DNA; 20 BP.
XX
AC   AAQ41846;
XX
DT   25-MAR-2003  (revised)
DT   03-SEP-1993  (first entry)
XX
DE   CHO C2 and C2' complex AT rich binding site #4.
XX
KW   Myc; c-myc; mammalian; E box; cancer; therapy; C1; C2; C2'; complex;
KW   homo-oligomer; hetero-oligomer; myogenin; Max; oncoprotein; primer;
KW   probe; electrophoretic mobility shift assay; EMSA; ss.
XX
OS   Synthetic.
XX
PN   WO9308701-A1.
XX
PD   13-MAY-1993.
XX
PF   09-OCT-1992;   92WO-US008603.
XX
PR   30-OCT-1991;   91US-00785567.
XX
PA   (GEHO ) GEN HOSPITAL CORP.
XX
PI   Kingston RE,  Papoulas O;
XX
DR   WPI; 1993-167291/20.
XX
PT   Prodn. of c-Myc protein from mammalian cells - and detection of c Myc
PT   inhibitors for use in cancer therapy.
XX
PS   Disclosure; Fig 7b; 101pp; English.
XX
CC   The sequences given in AAQ41826-61 represent sequences which are bound in
CC   an electrophoretic mobility shift assay (EMSA) by Myc. The isolated
CC   sequences contain the central E box core of CACGTG which binds very
CC   weakly with Myc homo-oligomers (C1 complex), but more tightly with Myc
CC   hetero-oligomers (C2 complex). The C2 complex requires a 26-29 kD factor
CC   in addition to Myc. The additional factor copurifies with Myc and
CC   resembles Max protein. A second copurifying 40-50 kD factor has been
CC   identified (forming C2' complex). Sites selected by the C2' complex
CC   contain the core CAGCTG which bears remarkable homology to a myogenin
CC   binding site (see AAQ41763). Oligonucleotides containing the E box can be
CC   used in the purification of Myc from a mammalian source. See also
CC   AAQ41761-861. The isolated target sequences may be used in a method to
CC   inhibit c-Myc oncoprotein activity. (Updated on 25-MAR-2003 to correct PN
CC   field.)
XX
SQ   Sequence 20 BP; 13 A; 3 C; 1 G; 3 T; 0 U; 0 Other;
```

```
  Query Match             0.4%;  Score 15.4;  DB 1;  Length 20;
  Best Local Similarity   94.1%;  Pred. No. 2.2e+02;
  Matches   16;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       3299 GATATATTTTTATTTTT 3315
              ||| ||||||||||||||
Db         20 GATGTATTTTTATTTTT 4
```

RESULT 222
AAZ03406
ID AAZ03406 standard; DNA; 20 BP.
XX
AC AAZ03406;
XX
DT 07-OCT-1999 (first entry)
XX
DE PCR primer used to amplify an ORF of Chlamydia trachomatis.
XX
KW Vaccine; eye disease; conventional trachoma; nonendemic trachoma;
KW paratrachoma; inclusion conjunctivitis; genital disease; perihepatitis;
KW nongonococcal uretritis; epidymitis; cervicitis; salpingitis; PCR primer;
KW bartholinitis; pneumopathy; venereal lymphogranulomatosis; ss.
XX
OS Synthetic.
OS Chlamydia trachomatis.
XX
PN WO9928475-A2.
XX
PD 10-JUN-1999.
XX
PF 27-NOV-1998; 98WO-IB001939.
XX
PR 28-NOV-1997; 97FR-00015041.
PR 17-DEC-1997; 97FR-00016034.
PR 04-NOV-1998; 98US-0107077P.
XX
PA (GEST) GENSET.
XX
PI Griffais R;
XX
DR WPI; 1999-371125/31.
XX
PT Genome sequence of Chlamydia trachomatis.
XX
PS Disclosure; Page 1604; 1755pp; English.
XX
CC PCR primers AAZ01426-Z06209 were used to amplify open reading frames
CC (ORFs) of the genome of Chlamydia trachomatis (see AAZ01425). These ORFs
CC encode polypeptides (see AAY36754-Y37949) which can be used as vaccines
CC against Chlamydia trachomatis. Antisense and ribozyme sequences can also
CC be used to control growth of the microorganism. Chlamydia trachomatis is
CC responsible for a large number of diseases, e.g. eye diseases such as
CC conventional trachoma, nonendemic trachoma, paratrachoma, and inclusion
CC conjunctivitis; genital diseases such as nongonococcal uretritis,
CC epidymitis, cervicitis, salpingitis, perihepatitis, bartholinitis;
CC pneumopathy in breast feeding infants; and venereal lymphogranulomatosis.
CC The polypeptides of the invention may be of use in treating these
CC diseases
XX
SQ Sequence 20 BP; 9 A; 0 C; 10 G; 1 T; 0 U; 0 Other;

```
  Query Match             0.4%;  Score 15.4;  DB 1;  Length 20;
  Best Local Similarity   94.1%;  Pred. No. 2.2e+02;
  Matches   16;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       2477 GCAGAAGGTGGAGAAGA 2493
              | ||||||||||||||||
Db          3 GAAGAAGGTGGAGAAGA 19
```

RESULT 223
AAA40987
ID AAA40987 standard; DNA; 20 BP.
XX
AC AAA40987;
XX
DT 16-AUG-2000 (first entry)
XX
DE Human TNFalpha antisense oligonucleotide ISIS# 100606.
XX
KW Antisense oligonucleotide; phosphorothioate; TNFalpha; cytokine; inhibit;
KW tumour necrosis factor alpha; inflammatory bowel disease; diabetes;
KW rheumatoid arthritis; infectious disease; multiple sclerosis; hepatitis;
KW pancreatitis; atopic dermatitis; allograft rejection; autoimmune disease;
KW inflammatory disease; ss.
XX
OS Synthetic.
XX
PN WO200020645-A1.
XX
PD 13-APR-2000.
XX
PF 05-OCT-1999; 99WO-US023205.
XX
PR 05-OCT-1998; 98US-00166186.
PR 18-MAY-1999; 99US-00313932.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Baker BF, Bennett CF, Butler MM, Shanahan WJ;
XX
DR WPI; 2000-303808/26.
XX
PT Oligonucleotide for treating diseases associated with human tumor
PT necrosis factor-alpha (TNF-alpha) such as, diabetes and rheumatoid
PT arthritis, comprises nucleotide sequence complementary to intron of
PT nucleic acid encoding TNF-alpha.
XX
PS Example 20; Page 95; 283pp; English.
XX
CC This sequence represents an antisense oligonucleotide sequence which
CC targets a region of the human tumour necrosis factor alpha (TNFalpha)
CC nucleotide sequence. TNFalpha is an important cytokine that plays a role
CC in host defence. It is produced mainly in macrophages and monocytes in
CC response to infection, invasion, injury or inflammation. Overexpression
CC of TNFalpha can result in disease states, particularly in infectious,
CC inflammatory and autoimmune diseases. The invention relates to antisense
CC oligonucleotides, such as that represented by the present sequence which
CC are capable of modulating the TNFalpha gene expression. The
CC oligonucleotides optionally have a phosphorothioate backbone, and may
CC also optionally contain at least one 2'-O-methoxyethyl modification. The
CC oligonucleotides are useful for modulating the expression of human
CC TNFalpha in cells and tissues, reducing a human cell inflammatory
CC response, reducing the blood glucose level in a human and treating a
CC human having a disease or condition associated with TNFalpha. Examples of
CC diseases associated with TNFalpha include diabetes, inflammatory bowel
CC disease, multiple sclerosis, pancreatitis, rheumatoid arthritis,
CC infectious disease, hepatitis, atopic dermatitis or allograft rejection.
CC The antisense oligonucleotides are also useful for modulating the
CC function of a selected nucleic acid sequence in adipose tissue
XX
SQ Sequence 20 BP; 8 A; 3 C; 5 G; 4 T; 0 U; 0 Other;

```
  Query Match             0.4%;  Score 15.4;  DB 1;  Length 20;
  Best Local Similarity   94.1%;  Pred. No. 2.2e+02;
  Matches   16;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       3416 TCAAGGAAGTATGGAAA 3432
              |||||||||| ||||||
Db          1 TCAAGGAAGTCTGGAAA 17
```

RESULT 224
AAA10948/c

```
ID   AAA10948 standard; DNA; 20 BP.
XX
AC   AAA10948;
XX
DT   14-JUL-2000  (first entry)
XX
DE   Primer #2 for collagen Ialpha1 gene fragment amplification.
XX
KW   PCR primer; vitamin D receptor; susceptibility; bone damage;
KW   polymorphism; increased risk; osteoporosis; structural damage; fracture;
KW   break; chips; hormone therapy; prevention; collagen I-alpha-1; ss.
XX
OS   Homo sapiens.
XX
PN   WO200015839-A1.
XX
PD   23-MAR-2000.
XX
PF   10-SEP-1999;   99WO-EP007719.
XX
PR   10-SEP-1998;   98GB-00019769.
XX
PA   (UYRO-) UNIV ROTTERDAM ERASMUS.
XX
PI   Uitterlinden AG,  Van Leeuwen JPTM,  Pols HAP;
XX
DR   WPI; 2000-271470/23.
XX
PT   Novel methods for determining the susceptibility to bone damage by
PT   screening for polymorphisms in the vitamin D receptor gene or collagen
PT   Ialpha1 gene.
XX
PS   Example 1; Page 9; 37pp; English.
XX
CC   This sequence represents a PCR primer used to amplify intron 1 of the
CC   collagen I-alpha-1 gene. The PCR product is used in the method of the
CC   invention for determining susceptibility to bone damage. The method
CC   comprises screening for polymorphisms in the vitamin D receptor (VDR)
CC   gene or the Collagen I-alpha-1 gene. The the presence of alleles A and/or
CC   T, and especially the haplotype baT, are associated with an increased
CC   risk of bone damage and a higher risk of bone fracture. The methods are
CC   used for determining the susceptibility to bone damage and osteoporosis.
CC   Bone damage may be any form of structural damage, including fractures,
CC   breaks or chips. Identification of those at risk using the method of the
CC   invention, allows for preventative measures to be taken, such as
CC   modifications to lifestyle, regular exercise, and changes in diet to
CC   strengthen bones, and hormone therapy. The present invention allows
CC   diagnosis of those at risk of developing osteoporosis, and so allows more
CC   effective preventative measures to be taken
XX
SQ   Sequence 20 BP; 2 A; 10 C; 4 G; 4 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 15.4;  DB 1;  Length 20;
  Best Local Similarity   94.1%;  Pred. No. 2.2e+02;
  Matches   16;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       2209 GCCAGGATGAGGACTGG 2225
              ||||||||||||  ||||
Db         19 GCCAGGATGAGGGCTGG 3


RESULT 225
AAD17705
ID   AAD17705 standard; DNA; 20 BP.
XX
AC   AAD17705;
XX
DT   10-DEC-2001  (first entry)
XX
DE   V. parahaemolyticus trhl amplifying primer #30.
XX
KW   Thermostable direct haemolysin-related haemolysin gene; trhl; trh2;
KW   thermostable direct haemolysin gene; tdh2; clinical examination;
KW   detection; public hygiene; food evaluation; food poisoning evaluation;
KW   PCR primer; ss.
XX
OS   Vibrio parahaemolyticus.
XX
PN   EP1134292-A2.
XX
PD   19-SEP-2001.
XX
PF   16-MAR-2001; 2001EP-00106364.
XX
PR   17-MAR-2000; 2000JP-00081805.
PR   17-MAR-2000; 2000JP-00081806.
PR   31-MAY-2000; 2000JP-00166503.
PR   31-MAY-2000; 2000JP-00166504.
PR   31-MAY-2000; 2000JP-00166505.
XX
PA   (TOYJ ) TOSOH CORP.
XX
PI   Ishizuka T,  Ishiguro T,  Saitoh J;
XX
DR   WPI; 2001-572721/65.
XX
PT   New oligonucleotides as primers and probes, useful for detection or
PT   amplification of Vibrio parahaemolyticus thermostable direct hemolysin-
PT   related hemolysin genes or RNA derived from them.
XX
PS   Disclosure; Page 31; 50pp; English.
XX
CC   The invention relates to oligonucleotides used for detection or
CC   amplification of a gene selected from the group consisting of Vibrio
CC   parahaemolyticus direct haemolysin-related thermostable haemolysin genes
CC   (trhl and trh2) and V. parahaemolyticus thermostable direct haemolysin
CC   gene (tdh2) or RNA derived therefrom. These oligonucleotides are useful
CC   as probe and primer for detection or amplification of V. parahaemolyticus
CC   trhl, trh2 and tdh2 genes or RNA derived from the genes for clinical
CC   examination, public hygiene, food evaluation or food poisoning
CC   evaluation. The present sequence is a primer used to amplify V.
CC   parahaemolyticus trhl
XX
SQ   Sequence 20 BP; 4 A; 4 C; 3 G; 9 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 15.4;  DB 1;  Length 20;
  Best Local Similarity   94.1%;  Pred. No. 2.2e+02;
  Matches   16;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1089 AATGTTTCTTCATTTTC 1105
              ||||  ||||||||||||
Db          4 AATGATTCTTCATTTTC 20


RESULT 226
ABQ78421/c
ID   ABQ78421 standard; DNA; 20 BP.
XX
AC   ABQ78421;
XX
DT   05-NOV-2002  (first entry)
XX
DE   Oligonucleotide corresponding to human nucleic acids.
XX
KW   Human; hereditary pancreatitis; HP; mutation; trypsinogen gene; ss.
XX
OS   Homo sapiens.
XX
PN   US6406846-B1.
XX
PD   18-JUN-2002.
XX
PF   14-OCT-1997;   97US-00949344.
XX
PR   14-OCT-1997;   97US-00949344.
XX
```

PA (WHIT/) WHITCOMB D.
XX
PI Whitcomb D, Ehrlich GD, Gorry MC;
XX
DR WPI; 2002-581937/62.
XX
PT Determining susceptibility of human patient to hereditary pancreatitis
PT comprises analyzing nucleic acid from patient for presence of mutation in
PT third exon of cationic trypsinogen gene that indicates hereditary
PT pancreatitis.
XX
PS Disclosure; Col 115; 66pp; English.
XX
CC The specification describes a method for determining whether a human
CC patient is susceptible to hereditary pancreatitis (HP). The method
CC comprises obtaining nucleic acid from the human patient and analysing the
CC nucleic acid to identify the presence of a single G to A transition
CC mutation in codon 117 in a third exon of a cationic trypsinogen gene, or
CC a single A to T transition mutation at codon 21 in second exon of a
CC cationic trypsinogen gene, that indicates HP. The method is useful for
CC determining whether a human patient is susceptible to HP. The present
CC sequence represents an oligonucleotide, which is used in the course of
CC the invention
XX
SQ Sequence 20 BP; 7 A; 6 C; 5 G; 2 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.4; DB 1; Length 20;
Best Local Similarity 94.1%; Pred. No. 2.2e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1098 TCATTTTCCCTGGTGAG 1114
||||||||||||||| |
Db 19 TCATTTTCCCTGGTGGG 3

RESULT 227
ACD05215
ID ACD05215 standard; DNA; 20 BP.
XX
AC ACD05215;
XX
DT 05-AUG-2003 (first entry)
XX
DE Tumour necrosis factor alpha antisense oligonucleotide #218.
XX
KW Tumour necrosis factor alpha; TNF-alpha; antiinflammatory; antirheumatic;
KW antiarthritic; antidiabetic; dermatological; hepatotropic; antiasthmatic;
KW inflammatory disorder; inflammatory bowel disease; Crohn's disease;
KW colitis; rheumatoid arthritis; diabetes; pancreatitis;
KW multiple sclerosis; atopic dermatitis; asthma; hepatitis;
KW antisense technology; ss.
XX
OS Synthetic.
XX
PN US2003022848-A1.
XX
PD 30-JAN-2003.
XX
PF 02-APR-2001; 2001US-00824322.
XX
PR 05-OCT-1998; 98US-00166186.
PR 18-MAY-1999; 99US-00313932.
XX
PA (BAKE/) BAKER B F.
PA (BENN/) BENNETT C F.
PA (BUTL/) BUTLER M M.
PA (SHAN/) SHANAHAN W R.
XX
PI Baker BF, Bennett CF, Butler MM, Shanahan WR;
XX
DR WPI; 2003-447433/42.
XX
PT Treating inflammatory disorders such as inflammatory bowel disease,
PT Crohn's disease or rheumatoid arthritis, in a subject, by administering
PT oligonucleotide which inhibits expression of human tumor necrosis factor
PT alpha.
XX
PS Example 22; Page 37; 142pp; English.
XX
CC The invention describes a method of treating an inflammatory disorder in
CC an individual, comprising administering to the individual an
CC oligonucleotide upto 30 nucleotides in length complementary to a nucleic
CC acid molecule encoding human tumor necrosis factor (TNF)-alpha. The
CC method is useful for treating an inflammatory disorder such as
CC inflammatory bowel disease, Crohn's disease, colitis or rheumatoid
CC arthritis, in an individual. The method is also useful for treating
CC diabetes, pancreatitis, multiple sclerosis, atopic dermatitis, asthma,
CC and hepatitis in an individual. This sequence represents an antisense
CC oligonucleotide used to modulate expression of tumour necrosis factor
CC alpha (TNF-alpha)
XX
SQ Sequence 20 BP; 8 A; 3 C; 5 G; 4 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.4; DB 1; Length 20;
Best Local Similarity 94.1%; Pred. No. 2.2e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 3416 TCAAGGAAGTATGGAAA 3432
||||||||| ||||||
Db 1 TCAAGGAAGTCTGGAAA 17

RESULT 228
ADF60910/c
ID ADF60910 standard; DNA; 20 BP.
XX
AC ADF60910;
XX
DT 12-FEB-2004 (first entry)
XX
DE Human collagen IalphaI PCR primer #2.
XX
KW Human; ss; collagen IalphaI; SNP; single nucleotide polymorphism;
KW osteoporosis; bone damage; serum homocysteine; folic acid; PCR; primer.
XX
OS Homo sapiens.
XX
PN US2003165928-A1.
XX
PD 04-SEP-2003.
XX
PF 11-OCT-2002; 2002US-00270714.
XX
PR 11-OCT-2001; 2001US-0328929P.
XX
PA (UITT/) UITTERLINDEN A G.
PA (VMEU/) VAN MEURS J B J.
XX
PI Uitterlinden AG, Van Meurs JBJ;
XX
DR WPI; 2003-898055/82.
XX
PT Determining susceptibility to bone damage by determining polymorphisms in
PT the methyltetrahydrofolate reductase and collagen I alpha 1 genes or
PT serum levels of homocysteine allows preventing or reducing risk by folic
PT acid treatment.
XX
PS Disclosure; SEQ ID NO 7; 25pp; English.
XX
CC The invention relates to new methods for determining susceptibility of a
CC subject to bone damage comprise determining which allele(s) of
CC polymorphisms in methyltetrahydrofolate reductase (MTHFR) and collagen
CC IalphaI are present in the subject, or measuring level of serum
CC homocysteine in the subject, where elevated level compared to a reference
CC population indicates susceptibility. Also included are determining the
CC susceptibility to bone damage in a subject identified as having the s

CC allele of the Sp1 polymorphism in collagen Ialpha1, preventing or
CC reducing susceptibility to bone damage in a subject (comprising
CC prescribing or administering folic acid to a subject at risk for bone
CC damage), preventing or reducing bone damage (comprising determining that
CC a subject as increases susceptibility to bone damage, and prescribing or
CC administering folic acid to the subject), and predicting response of a
CC subject to treatment (comprising determining which alleles of the MTHFR
CC and/or collagen Ialpha1 are present). The invention is useful to prevent
CC or reduce risk of bone damage (e.g. osteoporosis) by treating subjects
CC determined to be susceptible with folic acid. The present sequence is a
CC PCR primer used to amplify the polymorphic region of the human collagen
CC IalphaI gene.
XX
SQ Sequence 20 BP; 2 A; 10 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.4; DB 1; Length 20;
Best Local Similarity 94.1%; Pred. No. 2.2e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 2209 GCCAGGATGAGGACTGG 2225
||||||||||||| ||||
Db 19 GCCAGGATGAGGGCTGG 3

RESULT 229
ABZ87410/c
ID ABZ87410 standard; DNA; 20 BP.
XX
AC ABZ87410;
XX
DT 17-OCT-2003 (first entry)
XX
DE Human oligonucleotide sequence.
XX
KW Human; antisense; lung dysfunction; nasal airway dysfunction;
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW lung inflammation; respiratory disease; ds.
XX
OS Homo sapiens.
XX
PN WO200285308-A2.
XX
PD 31-OCT-2002.
XX
PF 23-APR-2002; 2002WO-US013135.
XX
PR 24-APR-2001; 2001US-0286137P.
XX
PA (EPIG-) EPIGENESIS PHARM INC.
XX
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
DR WPI; 2003-229219/22.
XX
PT Pharmaceutical composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisense to specific gene(s) or its
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT ubiquinone.
XX
PS Disclosure; SEQ ID NO 2652; 872pp; English.
XX
CC The invention relates to a novel pharmaceutical composition, which has a
CC first active agent comprising an oligonucleotide antisense to the
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC antiinflammatory steroid and ubiquinone. A composition of the invention
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
CC immunosuppressive, and cytostatic activity. The composition may have a
CC use in antisense gene therapy. The composition is useful for treating or
CC preventing a respiratory, lung or malignant disease or condition, also
CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC receptor, producing bronchodilation, increasing levels of ubiquinone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 20 BP; 6 A; 2 C; 3 G; 9 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.4; DB 1; Length 20;
Best Local Similarity 94.1%; Pred. No. 2.2e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1425 TTAGAACAACTAGAACA 1441
||||||||||||||| |
Db 17 TTAGAACAACTAGAATA 1

RESULT 230
ABD23640/c
ID ABD23640 standard; DNA; 20 BP.
XX
AC ABD23640;
XX
DT 29-JUL-2004 (first entry)
XX
DE Human myosin X-derived oligonucleotide SEQ ID 2652.
XX
KW Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
KW surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;
KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
KW pulmonary transplantation rejection; ss; primer.
XX
OS Homo sapiens.
XX
PN WO200285309-A2.
XX
PD 31-OCT-2002.
XX
PF 23-APR-2002; 2002WO-US013143.
XX
PR 24-APR-2001; 2001US-0286036P.
XX
PA (EPIG-) EPIGENESIS PHARM INC.
XX
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
DR WPI; 2003-093058/08.
XX
PT Pharmaceutical composition for treating asthma, has antisense
PT oligonucleotide containing less percentage of adenosine, targeted to
PT nucleic acids associated with lung airway or lung dysfunction, and
PT bronchodilating agent.
XX
PS Claim 15; SEQ ID NO 2652; 763pp; English.
XX
CC This invention describes a novel composition (a) a first active agent,
CC comprising oligonucleotides, effective for alleviating
CC bronchoconstriction, respiratory tract inflammation, allergies and
CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
CC surfactant depletion or hyposecretion, when administered to a mammal. The
CC oligonucleotides are derived from a gene encoding or regulating

```
CC   expression of a target polypeptide associated with lung airway or lung
CC   dysfunction or cancer and can be anti-sense to the corresponding mRNA.
CC   The invention also describes a kit, that comprises: (a) a delivery
CC   device, in separate containers, (b) the oligonucleotides, (c)
CC   instructions for adding a carrier and for use of the kit. The composition
CC   of the invention has antiallergic, antiinflammatory, antiasthmatic,
CC   analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
CC   beta-adrenergic agonist. The composition is useful for preventing or
CC   treating a respiratory, lung or malignant disease. The administered
CC   composition comprises oligo and is administered to reduce the production
CC   or availability, or to increase the degradation of the target mRNA or to
CC   reduce the amount of target polypeptide present in the lungs. The
CC   pulmonary obstruction, and/or bronchoconstriction and/or lung
CC   inflammation, allergies and/or surfactant hypoproduction are associated
CC   with a disease or condition such as pulmonary vasoconstriction,
CC   inflammation, allergies, asthma, impeded respiration, respiratory
CC   distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
CC   hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
CC   transplantation rejection, pulmonary infections, bronchitis or cancer.
CC   The reduced adenosine content of the anti-sense oligos corresponding to
CC   thymidines present in the target RNA serves to prevent the breakdown of
CC   the oligonucleotides into products that free adenosine into the system
CC   e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
CC   prevent any unwanted effects due to it
XX
SQ   Sequence 20 BP; 6 A; 2 C; 3 G; 9 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 15.4;  DB 1;  Length 20;
  Best Local Similarity   94.1%;  Pred. No. 2.2e+02;
  Matches   16;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1425 TTAGAACAACTAGAACA 1441
              ||||||||||||||| |
Db         17 TTAGAACAACTAGAATA 1


RESULT 231
ADH65191
ID   ADH65191 standard; DNA; 20 BP.
XX
AC   ADH65191;
XX
DT   25-MAR-2004  (first entry)
XX
DE   Human glucocorticoid receptor-specific antisense oligonucleotide #2025.
XX
KW   antisense oligonucleotide; glucocorticoid receptor; infection;
KW   inflammation; tumour formation; diabetes; obesity;
KW   cardiovascular disorder; hyperlipidaemia; Cushing's syndrome; human; ss;
KW   phosphorothioate backbone; 2'-methoxyethyl; 2'-MOE.
XX
OS   Homo sapiens.
XX
PN   WO2003099215-A2.
XX
PD   04-DEC-2003.
XX
PF   20-MAY-2003; 2003WO-US016084.
XX
PR   20-MAY-2002; 2002US-0381857P.
XX
PA   (PHAA ) PHARMACIA CORP.
XX
PI   Crosby SD,  Nalseth AE;
XX
DR   WPI; 2004-035034/03.
XX
PT   New antisense compound targeted to a nucleic acid molecule encoding
PT   mammalian glucocorticoid receptor, useful for treating diabetes, obesity,
PT   cardiovascular disorder, hyperlipidemia or Cushing's syndrome.
XX
PS   Claim 4; SEQ ID NO 2025; 985pp; English.
XX
CC   The invention comprises an antisense oligonucleotides that are targeted
CC   to nucleic acids encoding a mammalian glucocorticoid receptor. The
CC   antisense oligonucleotides of the invention are useful for preventing or
CC   delaying infection, inflammation or tumour formation. The antisense
CC   oligonucleotides are also useful for treating diabetes, obesity,
CC   cardiovascular disorders, hyperlipidaemia or Cushing's syndrome. The
CC   present DNA sequence represents an antisense oligonucleotide that targets
CC   the human glucocorticoid receptor gene. NOTE: The present sequence
CC   contains 2'-methoxyethyl (2'-MOE) wings and a phosphorothioate backbone.
XX
SQ   Sequence 20 BP; 3 A; 6 C; 3 G; 8 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 15.4;  DB 1;  Length 20;
  Best Local Similarity   94.1%;  Pred. No. 2.2e+02;
  Matches   16;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1323 TTCAAAGGTTGCTGTTC 1339
              |||||| ||||||||||
Db          4 TTCAAATGTTGCTGTTC 20


RESULT 232
ADH67561/c
ID   ADH67561 standard; DNA; 20 BP.
XX
AC   ADH67561;
XX
DT   25-MAR-2004  (first entry)
XX
DE   Human glucocorticoid receptor-specific antisense oligonucleotide #4395.
XX
KW   antisense oligonucleotide; glucocorticoid receptor; infection;
KW   inflammation; tumour formation; diabetes; obesity;
KW   cardiovascular disorder; hyperlipidaemia; Cushing's syndrome; human; ss;
KW   phosphorothioate backbone; 2'-methoxyethyl; 2'-MOE.
XX
OS   Homo sapiens.
XX
PN   WO2003099215-A2.
XX
PD   04-DEC-2003.
XX
PF   20-MAY-2003; 2003WO-US016084.
XX
PR   20-MAY-2002; 2002US-0381857P.
XX
PA   (PHAA ) PHARMACIA CORP.
XX
PI   Crosby SD,  Nalseth AE;
XX
DR   WPI; 2004-035034/03.
XX
PT   New antisense compound targeted to a nucleic acid molecule encoding
PT   mammalian glucocorticoid receptor, useful for treating diabetes, obesity,
PT   cardiovascular disorder, hyperlipidemia or Cushing's syndrome.
XX
PS   Claim 4; SEQ ID NO 4395; 985pp; English.
XX
CC   The invention comprises an antisense oligonucleotides that are targeted
CC   to nucleic acids encoding a mammalian glucocorticoid receptor. The
CC   antisense oligonucleotides of the invention are useful for preventing or
CC   delaying infection, inflammation or tumour formation. The antisense
CC   oligonucleotides are also useful for treating diabetes, obesity,
CC   cardiovascular disorders, hyperlipidaemia or Cushing's syndrome. The
CC   present DNA sequence represents an antisense oligonucleotide that targets
CC   the human glucocorticoid receptor gene. NOTE: The present sequence
CC   contains 2'-methoxyethyl (2'-MOE) wings and a phosphorothioate backbone.
XX
SQ   Sequence 20 BP; 13 A; 1 C; 0 G; 6 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 15.4;  DB 1;  Length 20;
  Best Local Similarity   94.1%;  Pred. No. 2.2e+02;
  Matches   16;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;
```

```
Qy       3300 ATATATTTTTATTTTTA 3316
              ||||||||||||| ||||
Db         20 ATATATTTTTATATTTA 4
```

RESULT 233
ADH67618/c
ID ADH67618 standard; DNA; 20 BP.
XX
AC ADH67618;
XX
DT 25-MAR-2004 (first entry)
XX
DE Human glucocorticoid receptor-specific antisense oligonucleotide #4452.
XX
KW antisense oligonucleotide; glucocorticoid receptor; infection;
KW inflammation; tumour formation; diabetes; obesity;
KW cardiovascular disorder; hyperlipidaemia; Cushing's syndrome; human; ss;
KW phosphorothioate backbone; 2'-methoxyethyl; 2'-MOE.
XX
OS Homo sapiens.
XX
PN WO2003099215-A2.
XX
PD 04-DEC-2003.
XX
PF 20-MAY-2003; 2003WO-US016084.
XX
PR 20-MAY-2002; 2002US-0381857P.
XX
PA (PHAA) PHARMACIA CORP.
XX
PI Crosby SD, Nalseth AE;
XX
DR WPI; 2004-035034/03.
XX
PT New antisense compound targeted to a nucleic acid molecule encoding
PT mammalian glucocorticoid receptor, useful for treating diabetes, obesity,
PT cardiovascular disorder, hyperlipidemia or Cushing's syndrome.
XX
PS Claim 4; SEQ ID NO 4452; 985pp; English.
XX
CC The invention comprises an antisense oligonucleotides that are targeted
CC to nucleic acids encoding a mammalian glucocorticoid receptor. The
CC antisense oligonucleotides of the invention are useful for preventing or
CC delaying infection, inflammation or tumour formation. The antisense
CC oligonucleotides are also useful for treating diabetes, obesity,
CC cardiovascular disorders, hyperlipidaemia or Cushing's syndrome. The
CC present DNA sequence represents an antisense oligonucleotide that targets
CC the human glucocorticoid receptor gene. NOTE: The present sequence
CC contains 2'-methoxyethyl (2'-MOE) wings and a phosphorothioate backbone.
XX
SQ Sequence 20 BP; 12 A; 1 C; 0 G; 7 T; 0 U; 0 Other;

  Query Match   0.4%; Score 15.4; DB 1; Length 20;
  Best Local Similarity   94.1%; Pred. No. 2.2e+02;
  Matches   16; Conservative   0; Mismatches   1; Indels   0; Gaps   0;

```
Qy       3300 ATATATTTTTATTTTTA 3316
              ||||||||||||| ||||
Db         19 ATATATTTTTATATTTA 3
```

RESULT 234
ADK95516
ID ADK95516 standard; DNA; 20 BP.
XX
AC ADK95516;
XX
DT 06-MAY-2004 (first entry)
XX
DE Primer of the invention #1236.
XX
KW human; single nucleotide polymorphism; SNP; ss; primer.
XX
OS Synthetic.
XX
PN JP2003259875-A.
XX
PD 16-SEP-2003.
XX
PF 08-MAR-2002; 2002JP-00064373.
XX
PR 08-MAR-2002; 2002JP-00064373.
XX
PA (KAGA-) KAGAKU GIJUTSU SHINKO JIGYODAN.
XX
DR WPI; 2004-093977/10.
XX
PT Novel polynucleotide useful for PCR amplification along with two DNA
PT fragment from another set of sequences, or for detecting single
PT nucleotide polymorphism in human gene.
XX
PS Claim 2; SEQ ID NO 4545; 2627pp; Japanese.
XX
CC The present invention relates to a polynucleotide isolated from a human
CC gene and is useful for detecting a single nucleotide polymorphism in a
CC human gene or for diagnosing of disease. The invention enables the
CC detection of a single nucleotide polymorphism in a human gene. The
CC present sequence represents a primer of the invention.
XX
SQ Sequence 20 BP; 1 A; 7 C; 5 G; 7 T; 0 U; 0 Other;

  Query Match   0.4%; Score 15.4; DB 1; Length 20;
  Best Local Similarity   94.1%; Pred. No. 2.2e+02;
  Matches   16; Conservative   0; Mismatches   1; Indels   0; Gaps   0;

```
Qy       2101 TTGTAGCAGTTCTGGTC 2117
              ||||||| |||||||||
Db          2 TTGTAGCCGTTCTGGTC 18
```

RESULT 235
ADN06176
ID ADN06176 standard; DNA; 20 BP.
XX
AC ADN06176;
XX
DT 17-JUN-2004 (first entry)
XX
DE Human SPS2 specific antisense oligonucleotide, ISIS 138245.
XX
KW Selenophosphate synthetase 2; SPS2; rheumatoid arthritis; infection;
KW inflammation; tumour; antisense therapy; human; antisense;
KW phosphorothioate backbone; ss.
XX
OS Homo sapiens.
OS Synthetic.
XX
FH Key   Location/Qualifiers
FT modified_base   1. .20
FT   /*tag= b
FT   /mod_base= OTHER
FT   /note= "Phosphorothioate backbone in which all cytidines
FT   are 5-methylcytidines"
FT modified_base   1. .5
FT   /*tag= a
FT   /mod_base= OTHER
FT   /note= "2'-methoxyethyl nucleotides"
FT modified_base   16. .20
FT   /*tag= c
FT   /mod_base= OTHER
FT   /note= "2'-methoxyethyl nucleotides"
XX
PN US2004002151-A1.

```
XX
PD   01-JAN-2004.
XX
PF   28-JUN-2002; 2002US-00186157.
XX
PR   28-JUN-2002; 2002US-00186157.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Watt AT,  Freier SM;
XX
DR   WPI; 2004-070740/07.
XX
PT   New antisense oligonucleotides for modulating selenophosphate synthetase
PT   2 (SPS2) expression, useful for diagnosing, preventing or treating
PT   conditions associated with SPS2, e.g. rheumatoid arthritis, inflammation
PT   or tumors.
XX
PS   Example 15; SEQ ID NO 20; 47pp; English.
XX
CC   The invention relates to antisense compounds, compositions and methods
CC   for modulating the expression of selenophosphate synthetase 2 (SPS2). The
CC   composition comprises antisense oligonucleotides targeted to SPS2 gene.
CC   The antisense oligonucleotide is useful for modulating the expression of
CC   SPS2 in cells or tissues to treat diseases associated with their
CC   expression, e.g. rheumatoid arthritis, infections, inflammation or
CC   tumours. It is also used for diagnostics, prophylaxis, or as research
CC   reagents or kits. The antisense oligonucleotide is useful in antisense
CC   therapy. The present sequence is an antisense oligonucleotide targeted to
CC   human SPS2 DNA. This sequence is used in the exemplification of the
CC   invention.
XX
SQ   Sequence 20 BP; 3 A; 8 C; 4 G; 5 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 15.4;  DB 1;  Length 20;
  Best Local Similarity   94.1%;  Pred. No. 2.2e+02;
  Matches   16;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        194 GGAGCCTCAGCCCTTCA 210
              | ||||||||||||||||
Db          2 GCAGCCTCAGCCCTTCA 18


RESULT 236
ADP88421/c
ID   ADP88421 standard; DNA; 20 BP.
XX
AC   ADP88421;
XX
DT   09-SEP-2004  (first entry)
XX
DE   Human telomerase antisense sequence related oligonucleotide #5.
XX
KW   cytostatic; cancer; antisense; human telomerase; cell proliferation;
KW   apoptosis; ss.
XX
OS   Homo sapiens.
XX
PN   WO2004053116-A2.
XX
PD   24-JUN-2004.
XX
PF   08-DEC-2003; 2003WO-DE004114.
XX
PR   06-DEC-2002; 2002DE-01058117.
PR   07-FEB-2003; 2003DE-01006084.
XX
PA   (UYDR ) UNIV DRESDEN TECH.
XX
PI   Schwenzer B,  Schmidt U,  Wirth MP,  Kraemer K,  Fuessel S,  Meye A;
XX
DR   WPI; 2004-468865/44.
XX
PT   New polynucleotide directed against the gene for telomerase catalytic
PT   subunit, useful for diagnosis and treatment of solid tumors and leukemia,
PT   interacts with specific regions of the mRNA.
XX
PS   Example 2; Page 26; 40pp; German.
XX
CC   The present invention relates to a polynucleotide, directed against a
CC   gene that encodes a catalytic subunit of human telomerase, which
CC   interacts with the mRNA of the catalytic subunit of telomerase in at
CC   least two target sequence regions, i.e. 2176-2250 and 2296-2392 of the
CC   sequence AF015950. The polynucleotides are used for diagnosis,
CC   prophylaxis, treatment, monitoring (of progression or therapy) and/or
CC   secondary treatment of diseases associated with growth, differentiation
CC   and/or division of cells, especially a very wide range of solid cancers
CC   and leukaemia, or their metastases, e.g. cancers of the urogenital or
CC   gastrointestinal tracts, liver, breast, prostate and bladder. They can
CC   also be used to inhibit vitality or proliferation rates of cells, to
CC   induce apoptosis and/or cause cell-cycle arrest. The present sequence is
CC   an oligonucleotide used in the exemplification of the invention.
XX
SQ   Sequence 20 BP; 5 A; 3 C; 7 G; 5 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 15.4;  DB 1;  Length 20;
  Best Local Similarity   94.1%;  Pred. No. 2.2e+02;
  Matches   16;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        468 AGCCACCTCTCTACCTT 484
              ||||||  ||||||||||
Db         17 AGCCACGTCTCTACCTT 1


RESULT 237
ADP68897
ID   ADP68897 standard; DNA; 20 BP.
XX
AC   ADP68897;
XX
DT   09-SEP-2004  (first entry)
XX
DE   Human DRAK2 antisense oligonucleotide ISIS182454.
XX
KW   Human; ss; antisense; DRAK2;
KW   death-associated protein kinase-rel. apoptosis-inducing protein kinase;
KW   serine/threonine kinase 17B; STK17B; apoptosis; degenerative disorder;
KW   neurological disorder; Alzheimer's disease; Parkinson's disease;
KW   Amylotrophic lateral sclerosis; ALS; retinitis pigmentosa;
KW   blood cell disorder; cancer; autoimmune disorder; viral infection;
KW   gene therapy; hyperproliferative disorder; chromosome 2.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   modified_base    1. .20
FT                    /*tag=  b
FT                    /mod_base= OTHER
FT                    /note= "Phosphorothioate backbone and all cytidines are 5
FT                    -methylcytidines"
FT   modified_base    1. .5
FT                    /*tag=  a
FT                    /mod_base= OTHER
FT                    /note= "2'-methoxyethyl residue"
FT   modified_base    16. .20
FT                    /*tag=  c
FT                    /mod_base= OTHER
FT                    /note= "2'-methoxyethyl residue"
XX
PN   US2004115645-A1.
XX
PD   17-JUN-2004.
XX
PF   12-DEC-2002; 2002US-00318819.
XX
PR   12-DEC-2002; 2002US-00318819.
```

XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Bennett CF, Dobie KW;
XX
DR WPI; 2004-449384/42.
XX
PT New oligonucleotide compound that inhibits expression of DRAK2, useful
PT for preparing a composition for treating hyperproliferative disorder,
PT e.g., cancer.
XX
PS Example 15; SEQ ID NO 43; 87pp; English.
XX
CC The invention relates to a new compound (e.g. an antisense
CC oligonucleotide), having a sequence comprising 8-80 bp targeted to a
CC nucleic acid encoding DRAK2 (death-associated protein kinase-related
CC apoptosis-inducing protein kinase 2, also known as serine/threonine
CC kinase 17B, STK17B), specifically hybridises with the nucleic acid
CC encoding DRAK2 (appearing as ADP68859 and representing bases 58695-149492
CC of human chromosome 2) and inhibits expression of DRAK2. Also included
CC are inhibiting the expression of DRAK2 in cells or tissues, screening for
CC a modulator of DRAK2, a diagnostic method for identifying a disease
CC state, a kit or assay device comprising the compound and treating an
CC animal having a disease or condition associated with DRAK2. The
CC oligonucleotide compound is useful for preparing a composition for
CC treating hyperproliferative disorders, degenerative disorders,
CC neurological disorders, Alzheimer's disease, Parkinson's disease,
CC Amylotrophic lateral sclerosis (ALS), retinitis pigmentosa, blood cell
CC disorders, cancer, autoimmune disorders and viral infection. The present
CC sequence represents an antisense oligonucleotide targeting DRAK2.
XX
SQ Sequence 20 BP; 6 A; 6 C; 3 G; 5 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.4; DB 1; Length 20;
Best Local Similarity 94.1%; Pred. No. 2.2e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 2897 CATTTCAACCAACTCAG 2913
||||||| |||||||||
Db 1 CATTTCAGCCAACTCAG 17

RESULT 238
ADQ29297
ID ADQ29297 standard; DNA; 20 BP.
XX
AC ADQ29297;
XX
DT 07-OCT-2004 (first entry)
XX
DE Human TNF alpha antisense oligonucleotide seqid 228.
XX
KW antimicrobial; antidiabetic; antirheumatic; antiarthritic;
KW gastrointestinal; antiinflammatory; neuroprotective; dermatological;
KW virucide; hepatotropic; human; TNF-alpha; tumour necrosis factor alpha;
KW survivin; TNF-alpha associated disorder; infection; diabetes;
KW rheumatoid arthritis; Crohn's disease; pancreatitis; multiple sclerosis;
KW atopic dermatitis; hepatitis; antisense oligonucleotide;
KW antisense technology; ss.
XX
OS Homo sapiens.
XX
PN US2004142346-A1.
XX
PD 22-JUL-2004.
XX
PF 29-AUG-2003; 2003US-00652795.
XX
PR 05-OCT-1998; 98US-00166186.
PR 18-MAY-1999; 99US-00313932.
PR 02-APR-2001; 2001US-00824322.
XX
PA (BAKE/) BAKER B F.
PA (BENN/) BENNETT C F.
PA (BUTL/) BUTLER M M.
PA (SHAN/) SHANAHAN W R.
XX
PI Baker BF, Bennett CF, Butler MM, Shanahan WR;
XX
DR WPI; 2004-552557/53.
XX
PT New double stranded RNA compound inhibiting expression of human TNF-alpha
PT and survivin, useful for diagnosing, preventing or treating infection,
PT diabetes, arthritis, multiple sclerosis and hepatitis.
XX
PS Example 22; SEQ ID NO 228; 156pp; English.
XX
CC The invention describes a double stranded RNA compound 8-80 nucleobases
CC in length targeted to a nucleic acid molecule encoding human TNF-alpha,
CC where the compound specifically hybridises with the nucleic acid molecule
CC encoding TNF-alpha and inhibits the expression of survivin. Also
CC described is a double stranded RNA compound having a fully defined
CC sequence of 20 bp (SEQ ID NO: 432) as given in the specification. Also
CC disclosed are TNF-alpha polypeptides, host cells, vectors and antibodies
CC used in the methods of the invention. The methods and compositions of the
CC present invention are useful for the diagnosis, prevention and/or
CC treatment of diseases or conditions associated with aberrant expression
CC or activity of TNF-alpha, such as infection, diabetes, rheumatoid
CC arthritis, Crohn's disease, pancreatitis, multiple sclerosis, atopic
CC dermatitis and hepatitis. This sequence represents a human tumour
CC necrosis factor alpha (TNF-alpha) antisense oligonucleotide.
XX
SQ Sequence 20 BP; 8 A; 3 C; 5 G; 4 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.4; DB 1; Length 20;
Best Local Similarity 94.1%; Pred. No. 2.2e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 3416 TCAAGGAAGTATGGAAA 3432
||||||||| ||||||
Db 1 TCAAGGAAGTCTGGAAA 17

RESULT 239
ADR02813
ID ADR02813 standard; DNA; 20 BP.
XX
AC ADR02813;
XX
DT 21-OCT-2004 (first entry)
XX
DE Antisense oligonucleotide targeting human TNFalpha ISIS100606.
XX
KW Human; tumour necrosis factor alpha; TNFalpha; ss;
KW antisense gene therapy; inflammatory disorder; phosphorothioate linkage;
KW methylene(methylimino) intersugar linkage; infection; autoimmune disease;
KW diabetes; rheumatoid arthritis; Crohn's disease; pancreatitis;
KW multiple sclerosis; atopic dermatitis; inflammatory bowel disease;
KW colitis; hepatitis.
XX
OS Homo sapiens.
XX
FH Key Location/Qualifiers
FT modified_base 1. .20
FT /*tag= a
FT /mod_base= OTHER
FT /note= "Phosphorothioate linkages"
XX
PN US2004152652-A1.
XX
PD 05-AUG-2004.
XX
PF 26-AUG-2003; 2003US-00647918.
XX
PR 05-OCT-1998; 98US-00166186.
PR 18-MAY-1999; 99US-00313932.

PR 02-APR-2001; 2001US-00824322.
XX
PA (BAKE/) BAKER B F.
PA (BENN/) BENNETT C F.
PA (BUTL/) BUTLER M M.
PA (SHAN/) SHANAHAN W R.
XX
PI Baker BF, Bennett CF, Butler MM, Shanahan WR;
XX
DR WPI; 2004-580193/56.
XX
PT Treating inflammatory disorders, such as diabetes, rheumatoid arthritis
PT and multiple sclerosis, using antisense oligonucleotides targeted to
PT nucleic acids encoding human tumor necrosis factor-alpha (TNF-alpha).
XX
PS Example 22; SEQ ID NO 228; 145pp; English.
XX
CC The invention relates to treating an inflammatory disorder in an
CC individual comprising administering an oligonucleotide (an antisense
CC oligonucleotide) up to 30 nucleotides in length complementary to a
CC nucleic acid molecule encoding human tumour necrosis factor-alpha (TNF-
CC alpha). The oligonucleotide useful in treating an inflammatory disorder
CC inhibits the expression of the human tumour necrosis factor-alpha, and
CC comprises at least an 8 nucleobase portion of any of 50 20-21 base pair
CC sequences, given in the specification. The antisense oligonucleotide is
CC administered orally, topically or parenterally. The oligonucleotide
CC comprises at least one modified intersugar linkage. The intersugar
CC linkage is a phosphorothioate linkage. The oligonucleotide further
CC comprises at least one 2'-O-methoxyethyl modification and at least one 5-
CC methyl cytidine, where every 2'-O-methoxyethyl modified cytidine residue
CC is a 5-methyl cytidine, and where every cytidine residue is a 5-methyl
CC cytidine. The modified intersugar linkage is a methylene(methylimino)
CC intersugar linkage. The methods and compositions of the present invention
CC are useful for the diagnosis, prevention and/or treatment of diseases or
CC conditions associated with aberrant expression or activity of the TNF-
CC alpha, such as inflammatory, infectious and autoimmune diseases,
CC including diabetes, rheumatoid arthritis, Crohn's disease, pancreatitis,
CC multiple sclerosis, atopic dermatitis, inflammatory bowel disease,
CC colitis and hepatitis. The present sequence is an antisense
CC oligonucleotide targeting the human TNFalpha gene.
XX
SQ Sequence 20 BP; 8 A; 3 C; 5 G; 4 T; 0 U; 0 Other;

```
  Query Match             0.4%;  Score 15.4;  DB 1;  Length 20;
  Best Local Similarity   94.1%;  Pred. No. 2.2e+02;
  Matches   16;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       3416 TCAAGGAAGTATGGAAA 3432
              ||||||||| ||||||
Db          1 TCAAGGAAGTCTGGAAA 17
```

RESULT 240
ADR67866
ID ADR67866 standard; DNA; 20 BP.
XX
AC ADR67866;
XX
DT 18-NOV-2004 (first entry)
XX
DE Prostaglandin E2 EP3 III reverse primer.
XX
KW ss; prostaglandin E2 EP3 III; hematological disease;
KW cardiovascular disease; urological disease; metabolic disease;
KW endocrinological disease; gastroenterological disease; cancer;
KW respiratory disease; regulator; primer.
XX
OS Homo sapiens.
OS Synthetic.
XX
PN WO2004074830-A2.
XX
PD 02-SEP-2004.
XX
PF 10-FEB-2004; 2004WO-EP001196.
XX
PR 24-FEB-2003; 2003EP-00003253.
XX
PA (FARB) BAYER HEALTHCARE AG.
XX
PI Golz S, Brueggemeier U, Summer H;
XX
DR WPI; 2004-653028/63.
XX
PT Screening agents for treating, e.g., cancer by detecting binding of a
PT compound to prostaglandin E2 EP3 III protein or polynucleotide,
PT determining activity of E2 EP3 III in presence of regulator and/or
PT compound at varying concentrations.
XX
PS Example 2; SEQ ID NO 4; 130pp; English.
XX
CC This sequence represents a primer which was used in the quantitation of
CC the distribution of prostaglandin E2 EP3 III polypeptide. The
CC prostaglandin E2 EP3 III polypeptide and corresponding nucleic acid may
CC be used for screening therapeutic agents for treating disease such as
CC hematological diseases, cardiovascular disease, urological diseases,
CC metabolic diseases, endocrinological diseases, gastroenterological
CC diseases, cancer, or respiratory diseases in a mammal. The methods
CC comprise detecting binding of a test compound to a prostaglandin E2 EP3
CC III polypeptide or polynucleotide; determining activity of prostaglandin
CC E2 EP3 III polypeptide at different concentrations of test compound; or
CC determining activity of prostaglandin E2 EP3 III polypeptide in the
CC presence of a regulator of prostaglandin E2 EP3 III polypeptide. The
CC regulators of prostaglandin E2 EP3 III are useful for preparing a
CC pharmaceutical composition for treating disease such as hematological
CC diseases, cardiovascular disease, urological diseases, metabolic
CC diseases, endocrinological diseases, gastroenterological diseases,
CC cancer, or respiratory diseases in a mammal. They are also useful for the
CC regulation of prostaglandin E2 EP3 III activity in a mammal having the
CC disease.
XX
SQ Sequence 20 BP; 4 A; 4 C; 6 G; 6 T; 0 U; 0 Other;

```
  Query Match             0.4%;  Score 15.4;  DB 1;  Length 20;
  Best Local Similarity   94.1%;  Pred. No. 2.2e+02;
  Matches   16;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       2834 TCAAGGAGCTTCCAGTG 2850
              ||| ||||||||||||||
Db          1 TCATGGAGCTTCCAGTG 17
```

RESULT 241
AAQ21516/c
ID AAQ21516 standard; DNA; 20 BP.
XX
AC AAQ21516;
XX
DT 25-MAR-2003 (revised)
DT 01-JUN-1992 (first entry)
XX
DE Mutant primer for amplifying exon 4 of CTP synthetase gene.
XX
KW MDR; chemotherapy; PCR; cytosine triphosphate sythetase; ss.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT misc_difference 20
FT /*tag= a
FT /note= "mutation"
XX
PN WO9201811-A.
XX
PD 06-FEB-1992.
XX

PF 25-JUL-1990; 90GB-00016287.
XX
PR 25-JUL-1990; 90GB-00016287.
PR 11-APR-1991; 91US-00682975.
XX
PA (IMCR) IMPERIAL CANCER RES TECHNOLOGY.
XX
PI Meuth M;
XX
DR WPI; 1992-064967/08.
XX
PT Assay method for CTP synthetase mutation(s) - utilising polymerase chain
PT reaction to reveal the presence of the multiple drug resistance phenotype
PT indicative of a mutation.
XX
PS Example 2; Page 33; 46pp; English.
XX
CC DNA or RNA was purified from white blood cells of patients with acute
CC leukaemia or solid tumour cells; the RNA was reverse transcribed into
CC cDNA. The downstream primer (AAQ21515) was used together with this primer
CC which has a mutant-specific nucleotide at its 3' end to amplify a region
CC of exon 4 of the CTP synthetase gene. A specific signal will only be seen
CC with samples contg. the mutant gene. See AAQ21488 and AAQ21512 for
CC upstream primers which can be used with other primers specific for
CC mutations in exon 4. (Updated on 25-MAR-2003 to correct PA field.)
XX
SQ Sequence 20 BP; 6 A; 3 C; 6 G; 5 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 2.3e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

```
Qy       1185 AAATTTGGACAGTTTCCCAC 1204
              ||| |||||||||| || |
Db         20 AAACTTGGACAGTTTTCCCC 1
```

RESULT 242
AAQ53908/c
ID AAQ53908 standard; DNA; 20 BP.
XX
AC AAQ53908;
XX
DT 25-MAR-2003 (revised)
DT 22-JUN-1994 (first entry)
XX
DE Primer for preparing probe for N-heparan sulphate sulphotransferase.
XX
KW N-heparan sulphate-N-deacetylase-N-sulphotransferase; heparan; heparin;
KW blood clotting; glycosaminoglycan; proteoglycans; neoplastic disease;
KW viral infection; ss.
XX
OS Synthetic.
XX
PN WO9325659-A1.
XX
PD 23-DEC-1993.
XX
PF 07-JUN-1993; 93WO-US005412.
XX
PR 16-JUN-1992; 92US-00899423.
PR 30-APR-1993; 93US-00057167.
XX
PA (UYMA-) UNIV MASSACHUSETTS MEDICAL CENT.
PA (GLYC-) GLYCOMED INC.
XX
PI Hirschberg CB, Orellana A, Hashimoto Y, Swiedler S, Wei Z;
PI Ishihara M;
XX
DR WPI; 1994-007517/01.
XX
PT DNA encoding cpds. which catalyse de-acetylation - and sulphation of
PT glycosamino-glycan(s), used to develop agonists or antagonists for use in
PT therapy.
XX
PS Disclosure; Page 23; 72pp; English.
XX
CC N-heparan sulphate sulphotransferase can catalyse the deacetylation and
CC sulphation of a glycosaminoglycan (GAG), namely heparan sulphate. It can
CC be used for treating conditions in which the stimulation or inhibition of
CC the deacetylation and or sulphation of heparan is desirable, such as
CC blood clotting disorders, neoplastic conditions and viral infection. The
CC enzyme can also be used to produce highly modified and therefore highly
CC active sulphated proteoglycans for use in therapy. This primer was used
CC to amplify a subclone of the enzyme coding sequence to produce a probe.
CC (Updated on 25-MAR-2003 to correct PN field.)
XX
SQ Sequence 20 BP; 0 A; 4 C; 7 G; 9 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 2.3e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

```
Qy       1840 CCAAAAAACAGGAACTACAG 1859
              ||| |||||||| || ||||
Db         20 CCAGAAAACAGGCACCACAG 1
```

RESULT 243
AAQ71950
ID AAQ71950 standard; DNA; 20 BP.
XX
AC AAQ71950;
XX
DT 25-MAR-2003 (revised)
DT 03-MAY-1995 (first entry)
XX
DE Human IL-2R gamma gene exon 4 seq 2 primer.
XX
KW IL2-R gamma gene; X-linked severe combined immunodeficiency; XSCID;
KW interleukin; ss.
XX
OS Homo sapiens.
XX
PN WO9420641-A1.
XX
PD 15-SEP-1994.
XX
PF 10-MAR-1994; 94WO-US002891.
XX
PR 12-MAR-1993; 93US-00031143.
PR 14-SEP-1993; 93US-00121435.
XX
PA (USSH) US DEPT HEALTH & HUMAN SERVICES.
XX
PI Leonard WJ, Noguchi M, Mcbride WO;
XX
DR WPI; 1994-303046/37.
XX
PT Diagnosis of X-linked severe combined immunodeficiency (XSCID) -
PT comprises detecting mutated IL-2R gamma gene, also vectors and transgenic
PT animals containing the mutated gene.
XX
PS Claim 12; Page 88; 98pp; English.
XX
CC AAQ71911 to AAQ71975 are primers for the human IL-2R gammma gene, these
CC were used to amplify DNA from mutated and normal IL-2R gamma genes. The
CC mutated gene DNA was obtained either from female carriers or male
CC sufferers of X-linked severe combined immunodeficiency (XSCID). The
CC amplified DNA from normal and affected individuals was then compared
CC using a variety of methods including northern blotting and dot and slot
CC hybridisation. From this a claimed method for the diagnosis of XSCID
CC carriers and sufferers was developed. (Updated on 25-MAR-2003 to correct
CC PN field.)
XX
SQ Sequence 20 BP; 4 A; 4 C; 4 G; 8 T; 0 U; 0 Other;

```
  Query Match             0.4%;  Score 15.2;  DB 1;  Length 20;
  Best Local Similarity   85.0%;  Pred. No. 2.3e+02;
  Matches   17;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       2093 AGTATCTGTTGTAGCAGTTC 2112
              || |||||||||  ||||||
Db          1 AGAATCTGTTGTTCCAGTTC 20
```

```
RESULT 244
AAQ95706
ID   AAQ95706 standard; DNA; 20 BP.
XX
AC   AAQ95706;
XX
DT   15-FEB-1996  (first entry)
XX
DE   Primer A (Group 7, set C) for marker D15S118, chromosome 15.
XX
KW   primer; polymerase chain reaction; PCR; linkage study; locus;
KW   microsatellite marker sequence; automated genotyping; allele;
KW   polymorphism; detection; Homo sapiens; ss.
XX
OS   Synthetic.
XX
PN   WO9515400-A1.
XX
PD   08-JUN-1995.
XX
PF   05-DEC-1994;   94WO-US013945.
XX
PR   03-DEC-1993;   93US-00160837.
XX
PA   (UYJO ) UNIV JOHNS HOPKINS.
XX
PI   Levitt RC;
XX
DR   WPI; 1995-215278/28.
XX
PT   Kit for automated genotyping contg. pairs of PCR primers - designed to
PT   amplify polymorphic nucleotide repeat sequences, arranged in sets each
PT   with a characteristic fluorescence label, useful e.g. in detection of
PT   disease related genetic rearrangement.
XX
PS   Disclosure; Fig 7G-2; 104pp; English.
XX
CC   The method aims to provide a collection of highly reproducible
CC   microsatellite marker sequences (MMS) at approx. 10-50 cM intervals
CC   throughout the human genome which can be detectably labelled. The MMS are
CC   polymorphic, simple sequence repeats and can be used in automated
CC   genotyping. esp. fluorescence-based. The primers correspond to the unique
CC   DNA sequence surrounding each marker, and PCR is used to detect each
CC   polymorphism. When the MMS show considerable polymorphism (ie. a
CC   difference in the number of repeats) between individuals, the markers can
CC   be particularly informative. The MMS can be ideal for linkage studies.
CC   Kits comprise at least 4 groups, of at least 3 sets, each comprising
CC   labelled primers for PCR amplification of the DNA. Group 7 primer pairs
CC   are shown in AAQ95687-734. The published size range of the D15S118 allele
CC   is 218-230 bp, and the degree of heterozygosity in the population is
CC   about 76%
XX
SQ   Sequence 20 BP; 9 A; 7 C; 1 G; 3 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 15.2;  DB 1;  Length 20;
  Best Local Similarity   85.0%;  Pred. No. 2.3e+02;
  Matches   17;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       3389 TCAAATATCCATATTAACCA 3408
              ||||| | |||||| |||||
Db          1 TCAAAGACCCATATCAACCA 20
```

```
RESULT 245
AAT47265/c
ID   AAT47265 standard; RNA; 20 BP.
XX
AC   AAT47265;
XX
DT   27-AUG-1997  (first entry)
XX
DE   5' fragment #2 of alfalfa mosaic virus.
XX
KW   Capped RNA molecule; mRNA maturation; translation initiation; influenza;
KW   endonuclease aptamer; RNase; therapy; inhibitor; ss.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1
FT                   /*tag=  a
FT                   /mod_base= 7-methylguanosine
FT   modified_base   2
FT                   /*tag=  b
FT                   /mod_base= triphosphorylated
FT   modified_base   3
FT                   /*tag=  c
FT                   /mod_base= 2'-O-methyluridine
XX
PN   WO9640159-A1.
XX
PD   19-DEC-1996.
XX
PF   03-JUN-1996;   96WO-US008394.
XX
PR   07-JUN-1995;   95US-00480068.
XX
PA   (MERI ) MERCK & CO INC.
XX
PI   Benseler F,  Cole JL,  Kuo LC,  Olsen DB;
XX
DR   WPI; 1997-051868/05.
XX
PT   Production of capped RNA or analogues - useful as substrates for
PT   influenza virus associated virally encoded endonuclease.
XX
PS   Claim 18; Page 12; 39pp; English.
XX
CC   AAT47264-T47280 represent capped RNA molecules produced by the method of
CC   the invention. The method of the invention is for producing capped RNA or
CC   RNA analogues. The method comprises reacting a RNA or analogue
CC   oligonucleotide with a phosphate addition agent to form a RNA or analogue
CC   mono-, di- or triphosphate, which is then capped. The presence of the cap
CC   is important for mRNA maturation, initiation of translation, and protects
CC   the mRNA against various RNases present in the cell. The capped RNA or
CC   analogue is an influenza endonuclease aptamer, useful for treating or
CC   preventing an influenza infection in an animal. The synthetic capped RNA
CC   are substrates for virally encoded endonuclease associated with influenza
CC   virus. The short non-extendible (due to their length or because of the
CC   modification of the 3' end of the oligo) RNA molecules are potent
CC   inhibitors of the cleavage of capped RNA by influenza endonuclease. They
CC   may be used to investigate viral and cellular mechanisms of
CC   transcription/translation, or mRNA maturation
XX
SQ   Sequence 20 BP; 3 A; 1 C; 2 G; 0 T; 14 U; 0 Other;

  Query Match             0.4%;  Score 15.2;  DB 1;  Length 20;
  Best Local Similarity   85.0%;  Pred. No. 2.3e+02;
  Matches   17;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       2683 GAAGAGGAAAAATAAAAACC 2702
              ||| |  ||||||||||||||
Db         20 GAAAATTAAAAATAAAAACC 1
```

RESULT 246

```
AAT89739
ID   AAT89739 standard; DNA; 20 BP.
XX
AC   AAT89739;
XX
DT   05-FEB-1998  (first entry)
XX
DE   PCR primer used for hepatitis C virus genotyping.
XX
KW   Hepatitis C virus; HCV; genotype determination; 1a; 1b; 2a; 2b; 3a; 3b;
KW   4; 5a; 6a; 6b; diagnosis; amplification; PCR; primer; ss.
XX
OS   Synthetic.
OS   Hepatitis C virus.
XX
PN   JP09234072-A.
XX
PD   09-SEP-1997.
XX
PF   01-FEB-1996;   96JP-00038875.
XX
PR   01-FEB-1995;   95JP-00035997.
PR   30-DEC-1995;   95JP-00352511.
XX
PA   (SRLS-) SRL KK.
XX
DR   WPI; 1997-497313/46.
XX
PT   Primers used for determining hepatitis C virus genotype - provide a rapid
PT   and accurate method of hepatitis C virus genotyping.
XX
PS   Claim 51; Page 18; 33pp; Japanese.
XX
CC   AAT89689-T89744 are individually claimed oligonucleotides used as PCR
CC   (polymerase chain reaction) primers for the discrimination of the
CC   genotype of hepatitis C virus (HCV). Classification of the genotype of
CC   HCV can be achieved precisely and simply according to the International
CC   Standardisation of Classification. The primers can be used to distinguish
CC   between HCV genotypes 1a, 1b, 2a, 2b, 3a, 3b, 4, 5a, 6a and 6b
XX
SQ   Sequence 20 BP; 2 A; 7 C; 7 G; 4 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 15.2;  DB 1;  Length 20;
  Best Local Similarity   85.0%;  Pred. No. 2.3e+02;
  Matches   17;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       3762 CAGATGGCTGGGATCCCTCC 3781
              ||  |||||||||| ||||
Db          1 CACGTGGCTGGGATCGCTCC 20


RESULT 247
AAV59158
ID   AAV59158 standard; DNA; 20 BP.
XX
AC   AAV59158;
XX
DT   14-DEC-1998  (first entry)
XX
DE   p53 sense primer.
XX
KW   ss; PCR; primer; amplification; mutant allele; carrier; cancer.
XX
OS   Synthetic.
XX
PN   WO9839472-A2.
XX
PD   11-SEP-1998.
XX
PF   04-MAR-1998;   98WO-DE000676.
XX
PR   04-MAR-1997;   97DE-01008758.
XX
PA   (WAGE/) WAGENER C.
XX
PI   Wagener C;
XX
DR   WPI; 1998-495865/42.
XX
PT   Detecting mutated alleles in presence of excess wild-type allele - by
PT   separation of wild-type on support carrying specific oligonucleotides,
PT   used to detect mutation(s), particularly for cancer diagnosis.
XX
PS   Example 2; Page 10; 17pp; German.
XX
CC   The primers AAV59158-V59159 were used to detect a point mutation in a p53
CC   gene as an example of the method of the invention to Detect mutant
CC   alleles among an excess of wild-type alleles. This is carried out by
CC   separating the wild type alleles using a carrier on which are bound one
CC   or more oligonucleotides complementary to the wild type. The method is
CC   used to detect mutants having one or more point mutations, deletions,
CC   inversions, insertions and/or substitutions of small or large genetic
CC   regions, particularly to detect genetic abnormalities for cancer
CC   diagnosis. The method can detect cancer cells in faeces, sputum,
CC   bronchial lavage, urine or tissue biopsies. Rare alleles can be detected,
CC   making the method suitable for detecting heterozygous or homozygous
CC   mutations or polymorphisms of any origin
XX
SQ   Sequence 20 BP; 2 A; 8 C; 1 G; 9 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 15.2;  DB 1;  Length 20;
  Best Local Similarity   85.0%;  Pred. No. 2.3e+02;
  Matches   17;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       3173 TTTTAAGTCTGTCTCCTTAC 3192
              ||| || ||||||||||| |
Db          1 TTTCAACTCTGTCTCCTTCC 20


RESULT 248
AAZ02662/c
ID   AAZ02662 standard; DNA; 20 BP.
XX
AC   AAZ02662;
XX
DT   07-OCT-1999  (first entry)
XX
DE   PCR primer used to amplify an ORF of Chlamydia trachomatis.
XX
KW   Vaccine; eye disease; conventional trachoma; nonendemic trachoma;
KW   paratrachoma; inclusion conjunctivitis; genital disease; perihepatitis;
KW   nongonococcal uretritis; epidymitis; cervicitis; salpingitis; PCR primer;
KW   bartholinitis; pneumopathy; venereal lymphogranulomatosis; ss.
XX
OS   Synthetic.
OS   Chlamydia trachomatis.
XX
PN   WO9928475-A2.
XX
PD   10-JUN-1999.
XX
PF   27-NOV-1998;   98WO-IB001939.
XX
PR   28-NOV-1997;   97FR-00015041.
PR   17-DEC-1997;   97FR-00016034.
PR   04-NOV-1998;   98US-0107077P.
XX
PA   (GEST ) GENSET.
XX
PI   Griffais R;
XX
DR   WPI; 1999-371125/31.
XX
PT   Genome sequence of Chlamydia trachomatis.
XX
PS   Disclosure; Page 1543; 1755pp; English.
```

```
XX
CC   PCR primers AAZ01426-Z06209 were used to amplify open reading frames
CC   (ORFs) of the genome of Chlamydia trachomatis (see AAZ01425). These ORFs
CC   encode polypeptides (see AAY36754-Y37949) which can be used as vaccines
CC   against Chlamydia trachomatis. Antisense and ribozyme sequences can also
CC   be used to control growth of the microorganism. Chlamydia trachomatis is
CC   responsible for a large number of diseases, e.g. eye diseases such as
CC   conventional trachoma, nonendemic trachoma, paratrachoma, and inclusion
CC   conjunctivitis; genital diseases such as nongonococcal uretritis,
CC   epidymitis, cervicitis, salpingitis, perihepatitis, bartholinitis;
CC   pneumopathy in breast feeding infants; and venereal lymphogranulomatosis.
CC   The polypeptides of the invention may be of use in treating these
CC   diseases
XX
SQ   Sequence 20 BP; 6 A; 6 C; 3 G; 5 T; 0 U; 0 Other;

  Query Match              0.4%;  Score 15.2;  DB 1;  Length 20;
  Best Local Similarity   85.0%;  Pred. No. 2.3e+02;
  Matches   17;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       3186 TCCTTACAGAGGTTAAAGTC 3205
              | ||| |||||||||||| |
Db         20 TTCTTGCAGAGGTTAAAGGC 1


RESULT 249
AAX92717/c
ID   AAX92717 standard; DNA; 20 BP.
XX
AC   AAX92717;
XX
DT   13-SEP-1999  (first entry)
XX
DE   PCR primer used to amplify an ORF of Chlamydia pneumoniae.
XX
KW   Respiratory disease; pneumonia; bronchitis; heart disease; sarcoidosis;
KW   sinusitis; purulent otitis media; erythema nodosum; pharyngitis; vaccine;
KW   neutralising epitope; PCR primer; ss.
XX
OS   Synthetic.
OS   Chlamydophila pneumoniae.
XX
PN   WO9927105-A2.
XX
PD   03-JUN-1999.
XX
PF   20-NOV-1998;   98WO-IB001890.
XX
PR   21-NOV-1997;   97FR-00014673.
PR   04-NOV-1998;   98US-0107078P.
XX
PA   (GEST ) GENSET.
XX
PI   Griffais R;
XX
DR   WPI; 1999-357842/30.
XX
PT   Genome sequence of Chlamydia pneumoniae.
XX
PS   Page 1533; Disclosure; 1912pp; English.
XX
CC   AAX91991-X97517 represent PCR primers used to amplify open reading frames
CC   and other nucleic acid sequences from the genome of Chlamydia pneumoniae
CC   (see AAX91990). C. pneumoniae causes respiratory disease such as
CC   pneumonia and bronchitis and is thought to be a contributing factor in
CC   heart disease, sarcoidosis, sinusitis, purulent otitis media, erythema
CC   nodosum or pharyngitis. The polypeptides encoded by the open reading
CC   frames of the C. pneumoniae genome (see AAY34584- AAY35879) can be used
CC   in immunogenic compositions as vaccines. Vectors containing C. pneumoniae
CC   nucleotides sequences can also be used as immunogenic compositions,
CC   especially where the vector directs the expression of a neutralising
CC   epitope of C. pneumoniae
XX
SQ   Sequence 20 BP; 5 A; 2 C; 7 G; 6 T; 0 U; 0 Other;

  Query Match              0.4%;  Score 15.2;  DB 1;  Length 20;
  Best Local Similarity   85.0%;  Pred. No. 2.3e+02;
  Matches   17;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1617 GAAAACTTCCTTCCAGATAT 1636
              |||||||||| |||||  ||
Db         20 GAAAACTTCCCTCCAGTCAT 1


RESULT 250
AAA61979/c
ID   AAA61979 standard; DNA; 20 BP.
XX
AC   AAA61979;
XX
DT   20-NOV-2000  (first entry)
XX
DE   Human MEKK5 phosphorothioate antisense oligonucleotide, SEQ ID NO:31.
XX
KW   Human MEKK5; mitogen-activated protein kinase kinase kinase 5;
KW   MEK kinase 5; MAP/ERK kinase kinase 5; ASK1; pro-apoptotic;
KW   apoptosis signal-regulating kinase 1; programmed cell death;
KW   serine/threonine kinase; MAP kinase cascade; JNK/SAPK module;
KW   Jun N-terminal kinase/stress-activated protein kinase; p38 module; MKK3;
KW   SEK1; transcription factor modulation; expression inhibition; antisense;
KW   inflammation; wound healing disorder; phosphorothioate; ss.
XX
OS   Homo sapiens.
XX
PN   US6080546-A.
XX
PD   27-JUN-2000.
XX
PF   23-JUL-1999;   99US-00359757.
XX
PR   23-JUL-1999;   99US-00359757.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Monia BP,  Cowsert LM,  Gaarde W;
XX
DR   WPI; 2000-464034/40.
XX
PT   Antisense compounds useful for treating or preventing infection,
PT   inflammation or tumor formation by inhibiting expression of human MEKK5.
XX
PS   Claim 3; Col 39; 35pp; English.
XX
CC   Sequences AAA61956-A61995 represent phosphorothioate antisense
CC   oligonucleotides targetted to the human MEKK5 gene, which inhibit its
CC   expression. The antisense oligonucleotides were designed to target
CC   different regions of the human MEKK5 RNA, and were analysed for their
CC   effect on MEKK5 mRNA levels by quantitative real-time PCR. MEKK5 (also
CC   known as mitogen-activated protein kinase kinase kinase 5, MEK kinase 5,
CC   MAP/ERK kinase kinase 5, apoptosis signal-regulating kinase 1, and ASK1)
CC   is a dual-specific serine/threonine kinase which mediates cellular
CC   responses to mitogenic stimuli by activating both the JNK/SAPK (Jun N-
CC   terminal kinase/stress-activated protein kinase) and p38 modules of MAP
CC   kinase cascades. MEKK5 is thought to play a critical role in the
CC   regulation of apoptosis (programmed cell death) by interacting with other
CC   proteins in this cascade and by phosphorylating downstream targets such
CC   as MKK3 and SEK1. MEKK5 also participates in another apoptosis-related
CC   signalling cascade involving the modulation of transcription factors.
CC   Activation and dimerisation of MEKK5 is induced by tumour necrosis factor
CC   -alpha (TNF-alpha), these processes being mediated by reactive oxygen
CC   species. Thioredoxin is able to associate with MEKK5 and inhibit MEKK5
CC   kinase activity and hence MEKK5-dependent apoptosis. The oligonucleotides
CC   of the invention are useful for diagnosis, prevention and treatment of
CC   conditions associated with MEKK5 expression, such as inflammation and
CC   wound healing disorders
XX
```

```
SQ   Sequence 20 BP; 5 A; 6 C; 2 G; 7 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 15.2;  DB 1;  Length 20;
  Best Local Similarity   85.0%;  Pred. No. 2.3e+02;
  Matches   17;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       2236 AGCTAGTAAAGAATTTAGAA 2255
              |||| ||| ||| |||||||
Db         20 AGCTGGTAGAGACTTTAGAA 1


RESULT 251
AAF32931
ID   AAF32931 standard; DNA; 20 BP.
XX
AC   AAF32931;
XX
DT   23-MAR-2001  (first entry)
XX
DE   Human B7-1 antisense oligonucleotide SEQ ID NO: 128.
XX
KW   Human; mouse; B7-1; B7-2; antisense; PCR primer; inflammation;
KW   autoimmune disorder; phosphorothioate backbone; ss.
XX
OS   Homo sapiens.
XX
PN   WO200074687-A1.
XX
PD   14-DEC-2000.
XX
PF   25-MAY-2000; 2000WO-US014471.
XX
PR   04-JUN-1999;   99US-00326186.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Bennett CF,  Vickers TA,  Karras JG;
XX
DR   WPI; 2001-049991/06.
XX
PT   Novel compound for diagnosing, preventing and treating immune disorders,
PT   comprising an oligonucleotide that specifically hybridizes with a nucleic
PT   acid sequence encoding B7 protein.
XX
PS   Example 12; Page 75; 162pp; English.
XX
CC   The present invention provides sequences of antisense oligonucleotides
CC   targeted at the murine and human B7-1 and B7-2 coding and mRNA sequences.
CC   The antisense sequences have phosphorothioate backbones and some
CC   nucleotides are 2'-methoxyethoxy residues. The sequences can be used in
CC   the treatment of inflammatory and autoimmune disorders, including asthma,
CC   juvenile diabetes mellitus, myasthenia gravis, Graves' disease,
CC   rheumatoid arthritis, allograft rejection, inflammatory bowel disease,
CC   multiple sclerosis, psoriasis, systemic lupus erythematosus, contact
CC   dermatitis, rhinitis, allergies and cancer
XX
SQ   Sequence 20 BP; 3 A; 4 C; 4 G; 9 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 15.2;  DB 1;  Length 20;
  Best Local Similarity   85.0%;  Pred. No. 2.3e+02;
  Matches   17;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1317 TTGAGTTTCAAAGGTTGCTG 1336
              || ||||||| || ||||||
Db          1 TTTAGTTTCACAGCTTGCTG 20


RESULT 252
AAF33171/c
ID   AAF33171 standard; DNA; 20 BP.
XX
AC   AAF33171;
XX
DT   23-MAR-2001  (first entry)
XX
DE   Human B7-1 antisense oligonucleotide SEQ ID NO: 254.
XX
KW   Human; mouse; B7-1; B7-2; antisense; PCR primer; inflammation;
KW   autoimmune disorder; phosphorothioate backbone; ss.
XX
OS   Homo sapiens.
XX
PN   WO200074687-A1.
XX
PD   14-DEC-2000.
XX
PF   25-MAY-2000; 2000WO-US014471.
XX
PR   04-JUN-1999;   99US-00326186.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Bennett CF,  Vickers TA,  Karras JG;
XX
DR   WPI; 2001-049991/06.
XX
PT   Novel compound for diagnosing, preventing and treating immune disorders,
PT   comprising an oligonucleotide that specifically hybridizes with a nucleic
PT   acid sequence encoding B7 protein.
XX
PS   Example 19; Page 98; 162pp; English.
XX
CC   The present invention provides sequences of antisense oligonucleotides
CC   targeted at the murine and human B7-1 and B7-2 coding and mRNA sequences.
CC   The antisense sequences have phosphorothioate backbones and some
CC   nucleotides are 2'-methoxyethoxy residues. The sequences can be used in
CC   the treatment of inflammatory and autoimmune disorders, including asthma,
CC   juvenile diabetes mellitus, myasthenia gravis, Graves' disease,
CC   rheumatoid arthritis, allograft rejection, inflammatory bowel disease,
CC   multiple sclerosis, psoriasis, systemic lupus erythematosus, contact
CC   dermatitis, rhinitis, allergies and cancer
XX
SQ   Sequence 20 BP; 7 A; 4 C; 8 G; 1 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 15.2;  DB 1;  Length 20;
  Best Local Similarity   85.0%;  Pred. No. 2.3e+02;
  Matches   17;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       3767 GGCTGGGATCCCTCCCCTGT 3786
              |||||| ||||||| ||| |
Db         20 GGCTGGCATCCCTCTCCTTT 1


RESULT 253
AAF60191
ID   AAF60191 standard; DNA; 20 BP.
XX
AC   AAF60191;
XX
DT   27-APR-2001  (first entry)
XX
DE   Human ATM gene exon 40 reverse primer.
XX
KW   Human; ATM; ataxia telangiectasia; mutation detection;
KW   single-stranded conformation polymorphism; SSCP; electrophoresis;
KW   PCR primer; ss.
XX
OS   Homo sapiens.
XX
PN   WO200107660-A1.
XX
PD   01-FEB-2001.
XX
PF   21-JUL-2000; 2000WO-US020011.
XX
PR   23-JUL-1999;   99US-00360416.
```

XX
PA (REGC) UNIV CALIFORNIA.
XX
PI Gatti RA;
XX
DR WPI; 2001-168574/17.
XX
PT Detecting a mutation or polymorphism in human ataxia telangiectasia gene
PT or polyexonic eukaryotic gene, involves using mega-single stranded
PT comformation polymorphism analysis.
XX
PS Claim 7; Page 54; 118pp; English.
XX
CC The present sequence is one of a number of primers used in a method for
CC detecting a mutation or a polymorphism in the human ATM gene, which is
CC associated with the disease ataxia telangiectasia, or a polyexonic
CC eukaryotic gene of at least 4 kb. The method uses an improved version of
CC single-stranded conformation polymorphism (SSCP) electrophoresis that
CC allows electrophoresis of two or three amplified segments in a single
CC lane. The method is useful for screening large, complex polyexonic
CC eukaryotic genes such as the ATM gene for mutations and polymorphisms.
CC The new mutations and polymorphisms in the ATM gene are useful for
CC performing more accurate screening of human DNA samples for mutations,
CC for distinguishing mutations from polymorphisms, and for improving the
CC efficiency of automated screening methods. The mega-SSCP method provides
CC a screening method of genes for multiple polymorphisms and mutations at
CC once. The method is particularly suitable for large, polyexonic,
CC eukaryotic genes, having mutations and polymorphisms at many points and
CC not merely at one or a few hot spots. Note: the SEQ ID assigned to this
CC sequence in the disclosure and claims of the the specification is one
CC number lower than the number given in the sequence listing
XX
SQ Sequence 20 BP; 6 A; 7 C; 1 G; 6 T; 0 U; 0 Other;

```
  Query Match             0.4%;  Score 15.2;  DB 1;  Length 20;
  Best Local Similarity   85.0%;  Pred. No. 2.3e+02;
  Matches   17;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1989 TGTGCAACACCTTCAGATAA 2008
              | ||||||||||||||  |||
Db             1 TTTGCAACACCTTCACCTAA 20
```

RESULT 254
AAC92601/c
ID AAC92601 standard; DNA; 20 BP.
XX
AC AAC92601;
XX
DT 27-MAR-2001 (first entry)
XX
DE Human nucleolin phosphorothioate antisense oligonucleotide, SEQ ID NO:51.
XX
KW Human nucleolin; P92; C23; phosphoprotein; ribosome biogenesis;
KW ribosome transport; cytokinesis; nucleogenesis; cell proliferation;
KW cell growth; transcriptional repression; replication;
KW signal transduction; chromatin decondensation; Ag-NOR family;
KW nucleolin antibody; systemic connective tissue disease; SLE;
KW systemic lupus erythematosus;
KW scleroderma-like chronic graft versus host disease;
KW expression inhibition; tumour formation; cancer; inflammation;
KW immune disorder; phosphorothioate; antisense oligonucleotide; ss.
XX
OS Homo sapiens.
XX
PN US6165786-A.
XX
PD 26-DEC-2000.
XX
PF 03-NOV-1999; 99US-00433699.
XX
PR 03-NOV-1999; 99US-00433699.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Bennett CF, Cowsert LM;
XX
DR WPI; 2001-079848/09.
XX
PT Novel antisense compound targeted to human nucleolin which specifically
PT hybridizes with and inhibits the expression of human nucleolin, useful
PT for modulating the expression of nucleolin in cells.
XX
PS Claim 14; Col 43-44; 41pp; English.
XX
CC Sequences AAC92560-C92639 represent antisense oligonucleotides targetted
CC to the human nucleolin gene, which inhibit its expression. The antisense
CC oligonucleotides were designed to target different regions of the human
CC nucleolin mRNA, and were analysed for their effect on nucleolin mRNA
CC levels by quantitative real-time PCR. Nucleolin (also known as P92 or
CC C23) is the most abundant nucleolar phosphoprotein in actively growing
CC cells. Nucleolin primarily participates in ribosome biogenesis and
CC transport of ribosomal components, being able to transiently bind to pre-
CC ribosomes in the nucleolus via a ribonucleoprotein consensus sequence.
CC However, it has also been shown to be involved in cytokinesis,
CC nucleogenesis, cell proliferation and growth, transcriptional repression,
CC replication, signal transduction, and chromatin decondensation. Nucleolin
CC is a member of the Ag-NOR (active ribosomal gene located in the nucleolar
CC organiser region) family of proteins which are markers of active
CC ribosomal genes, and whose expression is associated with the prediction
CC of tumour growth rate. The presence of antibodies against nucleolin are
CC associated with systemic connective tissue diseases such as systemic
CC lupus erythematosus (SLE) and scleroderma-like chronic graft versus host
CC disease. The oligonucleotides of the invention are useful for diagnosis,
CC prevention and treatment of conditions associated with nucleolin
CC expression, such as tumour formation, immune disorders and inflammation
XX
SQ Sequence 20 BP; 7 A; 2 C; 5 G; 6 T; 0 U; 0 Other;

```
  Query Match             0.4%;  Score 15.2;  DB 1;  Length 20;
  Best Local Similarity   85.0%;  Pred. No. 2.3e+02;
  Matches   17;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        978 TTTGACAAATCTGCTCTAGA 997
              ||| |||||||||||||  ||
Db         20 TTTAACAAATCTGCTCCTGA 1
```

RESULT 255
ABK99798/c
ID ABK99798 standard; DNA; 20 BP.
XX
AC ABK99798;
XX
DT 21-OCT-2002 (first entry)
XX
DE Mouse RAIDD antisense oligonucleotide #52.
XX
KW Antisense gene therapy; RAIDD; death domain; caspase recruitment domain;
KW CARD; hyperproliferative disorder; cancer; growth disorder; mouse;
KW metabolic disorder; infection; inflammation; tumour formation;
KW RIP associated ICH-1/CED-3-homologous protein with death domain;
KW receptor interacting protein; antisense oligonucleotide; ss.
XX
OS Mus musculus.
XX
PN WO200248314-A2.
XX
PD 20-JUN-2002.
XX
PF 29-OCT-2001; 2001WO-US050914.
XX
PR 01-NOV-2000; 2000US-00705267.
XX
PA (ISIS-) ISIS PHARM INC.
XX

PI Zhang H, Freier SM, Watt AT;
XX
DR WPI; 2002-583496/62.
XX
PT Novel antisense compound that hybridizes and inhibits nucleic acid
PT encoding RAIDD which is an adaptor molecule containing both death domain
PT and caspase recruitment domains, for treating hyperproliferative
PT disorder.
XX
PS Claim 3; Page 95; 144pp; English.
XX
CC The invention describes a compound (I) 8-50 nucleobases in length
CC targeted to a nucleic acid molecule (II) encoding RAIDD which is an
CC adaptor molecule containing both death domain (DD) and caspase
CC recruitment domains (CARD), where (I) specifically hybridises with and
CC inhibits expression of RAIDD, or specifically hybridises with at least an
CC 8-nucleobase portion of an active site on (II). (I) is useful for
CC inhibiting the expression of RAIDD (Receptor interacting protein (RIP)
CC associated ICH-1/CED-3-homologous protein with death domain) in cells or
CC tissues, and for treating an animal having a disease or condition
CC associated with RAIDD, where the disease or condition is a
CC hyperproliferative disorder such as cancer, or a growth or metabolic
CC disorder. (I) is also useful for diagnostics, therapeutics, prophylaxis,
CC as research reagents and kits, for distinguishing functions of various
CC members of a biological pathway, and in antisense gene therapy. (I) is
CC also useful prophylactically, e.g. to prevent or delay infection,
CC inflammation or tumour formation. This sequence represents a mouse RAIDD
CC antisense oligonucleotide used to control expression of the RAIDD protein
XX
SQ Sequence 20 BP; 4 A; 2 C; 5 G; 9 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 2.3e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 489 TTGACAGGAAACCCCATCCA 508
||||||| ||||| ||| ||
Db 20 TTGACAGAAAACCACATTCA 1

RESULT 256
ABX14629
ID ABX14629 standard; DNA; 20 BP.
XX
AC ABX14629;
XX
DT 04-MAR-2003 (first entry)
XX
DE Human lipoprotein lipase PCR primer #2.
XX
KW Human; ss; PCR; primer; lipoprotein lipase; LPL; obesity.
XX
OS Homo sapiens.
XX
PN KR2002041152-A.
XX
PD 01-JUN-2002.
XX
PF 27-NOV-2000; 2000KR-00070924.
XX
PR 27-NOV-2000; 2000KR-00070924.
XX
PA (SEOU-) SEOULIN BIO SCI CO LTD.
XX
PI Kang BY, Kim GT, Lee JJ;
XX
DR WPI; 2002-737873/80.
XX
PT Dna marker associated with obesity, used in a predictive method of
PT likelihood of obesity.
XX
PS Example 2; Page 5; 8pp; Korean.
XX
CC The invention relates to a DNA marker associated with obesity and a
CC predictive method of the likelihood of obesity using the DNA marker are
CC provided, used in inhibiting obesity effectively in preventive medicine.
CC The DNA marker associated with obesity has the nucleotide sequence of
CC human LPL (lipoprotein lipase) wherein a 6th base from the origin (+1) of
CC exon 4 in intron 3 of the human LPL is changed from C to T, wherein the
CC base-substituted nucleotide sequence of human LPL comprises a C type
CC allele gene with a MboII restriction enzyme-recognition site, i.e. GAAGA,
CC and a T type allele gene without the MboII restriction enzyme-recognition
CC site. The predictive method of likelihood of obesity comprises the steps
CC of: collecting DNA from a human blood sample; amplifying a region of the
CC intron 3 of the LPL gene in a DNA sample containing a region from -6 to -
CC 11 bases at the origin of the exon 4 by PCR; digesting the amplified DNA
CC with MboII; and determining the gene type of the blood sample based on
CC the band size of a digested DNA fragment. The present sequence is a PCR
CC primer used in the above method
XX
SQ Sequence 20 BP; 4 A; 6 C; 2 G; 8 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 2.3e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 2933 GAAAGTCATTTCAACTCTTA 2952
|| |||| ||||| ||||||
Db 1 GACAGTCTTTTCACCTCTTA 20

RESULT 257
ABT11882/c
ID ABT11882 standard; DNA; 20 BP.
XX
AC ABT11882;
XX
DT 19-DEC-2002 (first entry)
XX
DE Autonomously steroid producing yeast strain related oligo SEQ ID No 46.
XX
KW Genetically modified yeast strain; autonomous; metabolism of cholesterol;
KW 17alpha-hydroxypregnenolone; steroid; cortisol; cortexolone;
KW 17alpha-hydroxyprogesterone; ds.
XX
OS Unidentified.
XX
PN WO200261109-A2.
XX
PD 08-AUG-2002.
XX
PF 29-JAN-2002; 2002WO-FR000348.
XX
PR 31-JAN-2001; 2001FR-00001294.
XX
PA (AVET) AVENTIS PHARMA SA.
XX
PI Spagnoli R, Achstetter T, Cauet G, Degryse E, Dumas B, Pompon D;
PI Winter J;
XX
DR WPI; 2002-723143/78.
XX
PT New genetically modified yeast, useful for producing therapeutic steroids
PT from simple carbon source, provide high yields at low cost.
XX
PS Disclosure; Page 78; 79pp; French.
XX
CC The invention relates to a genetically modified yeast strain that
CC produces, autonomously from a simple carbon source, a steroid, or its
CC derivative, formed by metabolism of cholesterol. The steroid is 17alpha-
CC hydroxypregnenolone; cortisol; cortexolone or 17alpha-
CC hydroxyprogesterone. The genetically modified yeast strain is used to
CC produce therapeutically useful steroids, and can itself be used as a
CC pharmaceutical. This polynucleotide sequence represents an
CC oligonucleotide relating to the steroid producing genetically modified
CC yeast strain of the invention

```
XX
SQ   Sequence 20 BP; 6 A; 3 C; 7 G; 4 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 15.2;  DB 1;  Length 20;
  Best Local Similarity   85.0%;  Pred. No. 2.3e+02;
  Matches   17;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1558 GCATCTTCAATGGCTTGTCC 1577
              |||||||||||||| |  ||
Db         20 GCATCTTCAATGGCCTTACC 1

RESULT 258
ABI95123
ID   ABI95123 standard; DNA; 20 BP.
XX
AC   ABI95123;
XX
DT   16-FEB-2002  (first entry)
XX
DE   Capture oligonucleptide Zip ID#2210 oligo #9.
XX
KW   Human; K-ras; PCR primer; probe; capture probe; mutation detection;
KW   ligase detection reaction; LDR; p53; BRCA1; BRCA2; infectious disease;
KW   infection; 21 hydroxylase deficiency; Turner Syndrome; obesity; cancer;
KW   oncogene; tumour suppressor; human papillomavirus; forensic;
KW   environmental monitoring; food industry; feed industry; ss.
XX
OS   Synthetic.
XX
PN   WO200179548-A2.
XX
PD   25-OCT-2001.
XX
PF   04-APR-2001; 2001WO-US010958.
XX
PR   14-APR-2000; 2000US-0197271P.
XX
PA   (CORR ) CORNELL RES FOUND INC.
XX
PI   Barany F,  Zirvi M,  Gerry NP,  Favis R,  Kliman R;
XX
DR   WPI; 2002-034366/04.
XX
PT   Designing capture oligonucleotide probes for use on a support to which
PT   complementary oligonucleotides hybridize with little mismatch.
XX
PS   Example 5; Fig 29; 300pp; English.
XX
CC   The present invention describes a method (M1) for designing capture
CC   oligonucleotide probes (I) for use on a support to which complementary
CC   oligonucleotide probes (II) will hybridise with little mismatch, where
CC   (I) have melting temperatures within a narrow range. The method is useful
CC   for detecting infectious diseases caused by bacterial infectious agents
CC   e.g. Salmonella, Listeria monocytogenes and Haemophilus influenza, fungal
CC   infectious agents e.g. Cryptococcus neoformans, Candida albicans and
CC   Aspergillus fumigautus, viruses e.g. T-cell lymphocytotrophis cirus,
CC   Epstein-Barr virus and polio virus, and parasitic infectious agents
CC   selected from Onchoverva volvulus, Entamoeba histolytica and Dracunculus
CC   medinesis. The method is also useful for detecting genetic diseases such
CC   as 21 hydroxylase deficiency, Turner Syndrome and obesity defects.
CC   Detecting cancer involving oncogenes, tumour suppressor genes, or genes
CC   involved in DNA amplification, replication, recombination or repair, the
CC   cancer is specifically associated with a gene selected from BRCA1 gene,
CC   p53 gene, human papillomavirus types 16 and 18 and liver cancers. The
CC   method is also used for environmental monitoring, forensics and the food
CC   and feed industry, detecting comprises scanning (using e.g. a scanning
CC   electron microscope and infrared microscope) the support at the
CC   particular sites and identifying if ligation of the oligonucleotide probe
CC   sets occurred and correlating (using a computer) identified ligation to a
CC   presence or absence of the target nucleotide sequences. ABI82074 to
CC   ABI97546 represent oligonucleotide sequences used in the exemplification
CC   of the present invention

XX
SQ   Sequence 20 BP; 4 A; 6 C; 6 G; 4 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 15.2;  DB 1;  Length 20;
  Best Local Similarity   85.0%;  Pred. No. 2.3e+02;
  Matches   17;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1346 TGATTTTGGGACAACCAGCC 1365
              ||||| |||||| | |||||
Db          1 TGATTCTGGGACCAGCAGCC 20

RESULT 259
ACF33763/c
ID   ACF33763 standard; DNA; 20 BP.
XX
AC   ACF33763;
XX
DT   24-SEP-2003  (first entry)
XX
DE   Human CREB phosphorothioate antisense oligonucleotide, SEQ ID NO:21.
XX
KW   Human; CREB; cAMP response element binding protein; CREB1; bZIP;
KW   basic leucine zipper; transcription factor; intracellular signalling;
KW   spermatogenesis; circadian rhythm; memory; apoptosis;
KW   hyperproliferative disorder; cancer; tumour; blood; soft tissue;
KW   apoptosis related disease; neuronal disorder; chromosome 2q32.3-34;
KW   cytostatic; neuroprotective; expression inhibition; phosphorothioate;
KW   antisense oligonucleotide; ss.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   modified_base    1. .20
FT                    /*tag=  a
FT                    /mod_base= OTHER
FT                    /note= "This oligonucleotide has a phosphorothioate
FT                    backbone with all cytosine residues being 5-
FT                    methylcytosines. Optionally, it also has  2-
FT                    'methyoxyethyl (2'-MOE) wings at the 5'  and 3' ends,
FT                    which are 5 nucleotides in length"
XX
PN   WO2003030617-A2.
XX
PD   17-APR-2003.
XX
PF   07-OCT-2002; 2002WO-US032181.
XX
PR   10-OCT-2001; 2001US-00973827.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Monia BP,  Cowsert LM;
XX
DR   WPI; 2003-381663/36.
XX
PT   New antisense oligonucleotides for modulating CREB (cAMP response element
PT   binding protein) gene expression, useful for preventing or treating e.g.
PT   cancers, a disease arising from aberrant apoptosis, or neuronal
PT   disorders.
XX
PS   Claim 3; Page 74; 91pp; English.
XX
CC   The invention relates to antisense oligonucleotides (ACF33752-ACF33779)
CC   targeted to the human CREB (cAMP response element binding protein) gene,
CC   which inhibit its expression. The oligonucleotides were designed to
CC   target different regions of human CREB mRNA, and were analysed for their
CC   effect on CREB expression by quantitative real-time PCR. CREB (also known
CC   as CREB1) is a member of the basic leucine zipper (bZIP) family of
CC   transcription factors, and activates transcription of target genes in
CC   response to a diverse array of stimuli including peptide hormones, growth
CC   factors and protein kinases. It is a component of intracellular
CC   signalling events which regulate a wide variety of biological functions,
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```
CC   including spermatogenesis, circadian rhythms and memory. Overexpression
CC   of CREB has been found to induce apoptosis in certain cells, although
CC   CREB overexpression may also be linked to cancer as it is constitutively
CC   activated in human somatotroph adenomas. CREB may also play a role in the
CC   development of drug dependency, as it has been found to mediate morphine-
CC   induced upregulation of the cAMP pathways that contribute to opiate
CC   dependency. The oligonucleotides of the invention are useful for
CC   diagnosis, prevention and treatment of CREB-related disorders, such as
CC   hyperproliferative disorders (particularly cancer, e.g., those of blood
CC   and soft tissue), diseases or conditions arising from aberrant apoptosis,
CC   or neuronal disorders. The present sequence represents a human H-ras
CC   phosphorothioate antisense oligonucleotide used as a positive control in
CC   determining optimal oligonucleotide concentration for a particular cell
CC   line
XX
SQ   Sequence 20 BP; 3 A; 2 C; 10 G; 5 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 15.2;  DB 1;  Length 20;
  Best Local Similarity   85.0%;  Pred. No. 2.3e+02;
  Matches   17;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       2377 CCCAGCACTTCATCCAGAGC 2396
              |||||||||||  | || |||
Db         20 CCCAGCACTTCCTACACAGC 1


RESULT 260
ADB99938
ID   ADB99938 standard; DNA; 20 BP.
XX
AC   ADB99938;
XX
DT   04-DEC-2003  (first entry)
XX
DE   Vitamin D nuclear receptor antisense oligonucleotide, SEQ ID 77.
XX
KW   Cytostatic; gene therapy; antisense oligonucleotide; human;
KW   vitamin D nuclear receptor; cancer; developmental disorder;
KW   phosphorothioate; ss.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "This oligonucleotide has a phosphorothioate
FT                   backbone and 2-'methyoxyethyl (2'-MOE) wings at the 5'
FT                   and 3' ends, which are 5 nucleotides in length. Also all
FT                   cytidine residues are 5-methylcytidines"
XX
PN   WO2003041657-A2.
XX
PD   22-MAY-2003.
XX
PF   13-NOV-2002; 2002WO-US036692.
XX
PR   14-NOV-2001; 2001US-00000213.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Baker BF,  Dobie K,  Roach MP;
XX
DR   WPI; 2003-468578/44.
XX
PT   New antisense oligonucleotides for modulating vitamin D nuclear receptor
PT   gene expression, particularly useful for treating or preventing cancer or
PT   developmental disorder, or as diagnostics or research reagents.
XX
PS   Example 15; SEQ ID NO 77; 122pp; English.
XX
CC   The present invention relates to novel antisense oligonucleotides
CC   (ADB99875-ADB99952) which are targeted to a human vitamin D nuclear
CC   receptor coding sequence (ADB99864), and specifically hybridizes with and
CC   inhibits the expression of vitamin D nuclear receptor. The antisense
CC   oligonucleotides are useful for treating an animal having a disease or
CC   condition associated with vitamin D nuclear receptor, e.g. cancer or
CC   developmental disorder.
XX
SQ   Sequence 20 BP; 4 A; 6 C; 6 G; 4 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 15.2;  DB 1;  Length 20;
  Best Local Similarity   85.0%;  Pred. No. 2.3e+02;
  Matches   17;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       2495 CCTGCTCAGGCAGCAGGTGG 2514
              |||  |||||| ||||| |||
Db          1 CCTTCTCAGGAAGCAGCTGG 20


RESULT 261
ADB90006
ID   ADB90006 standard; DNA; 20 BP.
XX
AC   ADB90006;
XX
DT   04-DEC-2003  (first entry)
XX
DE   Antinsense oligonucleotide targeting mouse C3 component, ISIS140094.
XX
KW   Mouse; ss; antisense; complement component C3; inflammation;
KW   septic shock; multiple organ failure; hyperacute organ failure;
KW   autoimmune disorder; CNS inflammation; multiple sclerosis;
KW   atherosclerosis; tumour.
XX
OS   Mus musculus.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag=  b
FT                   /mod_base= OTHER
FT                   /note= "Phosphorothioate backbone and all cytosines are 5
FT                   -methyl cytosines"
FT   modified_base   1. .5
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethyl nucleotides"
FT   modified_base   16. .20
FT                   /*tag=  c
FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethyl nucleotides"
XX
PN   US2003096775-A1.
XX
PD   22-MAY-2003.
XX
PF   23-OCT-2001; 2001US-00001076.
XX
PR   23-OCT-2001; 2001US-00001076.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Graham MJ,  Watt AT;
XX
DR   WPI; 2003-606441/57.
XX
PT   New antisense oligonucleotides targeted to a nucleic acid molecule
PT   encoding complement component C3, useful for treating a disease or
PT   condition associated with complement component C3, e.g. autoimmune
PT   disorder or infection.
XX
PS   Claim 3; Page 27; 72pp; English.
XX
CC   The invention relates to a compound 8-50 nucleobases in length targeted
CC   to a nucleic acid molecule encoding complement component C3. The compound
CC   specifically hybridises with the nucleic acid molecule encoding
```

```
CC   complement component C3 and inhibits the expression of complement
CC   component C3, or specifically hybridises with at least an 8-nucleobase
CC   portion of an active site on a nucleic acid molecule encoding complement
CC   component C3. Also included are a composition comprising the compound and
CC   a pharmaceutical carrier or diluent, inhibiting the expression of
CC   complement component C3 in cells or tissues (comprising contacting the
CC   cells or tissues with the compound cited above) and treating an animal
CC   having a disease or condition associated with complement component C3
CC   comprising administering to the animal the compound cited above so that
CC   expression of complement component C3 is inhibited. The antisense
CC   compounds are useful for inhibiting the expression of complement
CC   component C3 in cells or tissues, or for treating an animal having a
CC   disease or condition associated with complement component C3 such as an
CC   autoimmune disorder (e.g. multiple sclerosis), an infection, or
CC   atherosclerosis, inflammation, septic shock, multiple organ failure,
CC   hyperacute organ failure and CNS inflammation. The compounds are also
CC   useful as research reagents and diagnostics, in distinguishing functions
CC   of various members of a biological pathway, or for preventing or delaying
CC   infection, inflammation or tumour formation. The present sequence is an
CC   antisense oligonucleotide targeting mouse C3.
XX
SQ   Sequence 20 BP; 5 A; 6 C; 4 G; 5 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 15.2;  DB 1;  Length 20;
  Best Local Similarity   85.0%;  Pred. No. 2.3e+02;
  Matches   17;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1399 TTACCATGAGTTCAAACTTC 1418
              | ||| |||| |||||||||
Db          1 TGACCCTGAGGTCAAACTTC 20


RESULT 262
ADC83901/c
ID   ADC83901 standard; DNA; 20 BP.
XX
AC   ADC83901;
XX
DT   01-JAN-2004  (first entry)
XX
DE   Human papillomavirus type 33 (HPV 33) detection oligonucleotide #5.
XX
KW   probe; human papilloma virus; HPV; detection; identification; ss.
XX
OS   Human papillomavirus type 33.
XX
PN   EP1302550-A1.
XX
PD   16-APR-2003.
XX
PF   10-OCT-2001; 2001EP-00123379.
XX
PR   10-OCT-2001; 2001EP-00123379.
XX
PA   (KING-) KING CAR FOOD IND CO LTD.
XX
PI   Lin C,  Lin R,  You C,  Huang H,  Lee B,  Lee H,  Lin Y,  Fan C;
PI   Hsu H,  Shih C,  Yeh C,  Kao Y,  Pan C,  Chan P;
XX
DR   WPI; 2003-432398/41.
XX
PT   Detector for identifying human papilloma virus subtypes, comprises
PT   carrier having two parts carrying first and second oligonucleotides that
PT   respectively hybridize with DNA contained in first and second subtypes of
PT   the virus.
XX
PS   Claim 4; SEQ ID NO 131; 221pp; English.
XX
CC   The invention comprises oligonucleotides for detecting and identifying
CC   subtypes of human papilloma virus (HPV) contained in a sample. The
CC   oligonucleotides of the invention are useful for simultaneously detecting
CC   and identifying subtypes of HPVs. The present DNA sequence represents an
CC   HPV detection oligonucleotide of the invention.
XX
SQ   Sequence 20 BP; 12 A; 1 C; 2 G; 5 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 15.2;  DB 1;  Length 20;
  Best Local Similarity   85.0%;  Pred. No. 2.3e+02;
  Matches   17;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       3304 ATTTTTATTTTTATATATCC 3323
              ||||| |||||||||| | |
Db         20 ATTTTCATTTTTATATGTAC 1


RESULT 263
ADC84033/c
ID   ADC84033 standard; DNA; 20 BP.
XX
AC   ADC84033;
XX
DT   01-JAN-2004  (first entry)
XX
DE   Human papillomavirus type 52 (HPV 52) detection oligonucleotide #6.
XX
KW   probe; human papilloma virus; HPV; detection; identification; ss.
XX
OS   Human papillomavirus type 52.
XX
PN   EP1302550-A1.
XX
PD   16-APR-2003.
XX
PF   10-OCT-2001; 2001EP-00123379.
XX
PR   10-OCT-2001; 2001EP-00123379.
XX
PA   (KING-) KING CAR FOOD IND CO LTD.
XX
PI   Lin C,  Lin R,  You C,  Huang H,  Lee B,  Lee H,  Lin Y,  Fan C;
PI   Hsu H,  Shih C,  Yeh C,  Kao Y,  Pan C,  Chan P;
XX
DR   WPI; 2003-432398/41.
XX
PT   Detector for identifying human papilloma virus subtypes, comprises
PT   carrier having two parts carrying first and second oligonucleotides that
PT   respectively hybridize with DNA contained in first and second subtypes of
PT   the virus.
XX
PS   Claim 4; SEQ ID NO 263; 221pp; English.
XX
CC   The invention comprises oligonucleotides for detecting and identifying
CC   subtypes of human papilloma virus (HPV) contained in a sample. The
CC   oligonucleotides of the invention are useful for simultaneously detecting
CC   and identifying subtypes of HPVs. The present DNA sequence represents an
CC   HPV detection oligonucleotide of the invention.
XX
SQ   Sequence 20 BP; 12 A; 2 C; 2 G; 4 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 15.2;  DB 1;  Length 20;
  Best Local Similarity   85.0%;  Pred. No. 2.3e+02;
  Matches   17;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       3304 ATTTTTATTTTTATATATCC 3323
              ||||| |||||||||| | |
Db         20 ATTTTCATTTTTATATGTGC 1


RESULT 264
ADE27866
ID   ADE27866 standard; DNA; 20 BP.
XX
AC   ADE27866;
XX
DT   29-JAN-2004  (first entry)
XX
```

DE Human B7-1 targeted oligonucleotide SEQ ID 128.
XX
KW ss; human; B7-1; inflammatory skin disorder; antisense; psoriasis;
KW contact dermatitis; atopic dermatitis; seborrheic dermatitis;
KW nummular dermatitis; generalised exfoliative dermatitis; eczema;
KW critical costimulatory molecule.
XX
OS Synthetic.
OS Homo sapiens.
XX
PN US2003176374-A1.
XX
PD 18-SEP-2003.
XX
PF 09-MAY-2001; 2001US-00851871.
XX
PR 31-DEC-1996; 96US-00777266.
PR 04-JUN-1999; 99US-00326186.
PR 25-MAY-2000; 2000WO-US014471.
XX
PA (BENN/) BENNETT C F.
PA (VICK/) VICKERS T A.
PA (KARR/) KARRAS J G.
XX
PI Bennett CF, Vickers TA, Karras JG;
XX
DR WPI; 2003-863863/80.
XX
PT Treating an inflammatory skin disorder such as psoriasis comprises
PT topically applying an antisense compound targeted to the nucleic acid
PT encoding human B7 protein.
XX
PS Example 12; SEQ ID NO 128; 88pp; English.
XX
CC The invention relates to a method of treating an inflammatory skin
CC disorder in an individual by topically applying an antisense compound
CC targeted to a nucleic acid molecule encoding a human B7 protein. The
CC invention is for treating an inflammatory skin disorder in individual.
CC The skin disorder is psoriasis, contact dermatitis, atopic dermatitis,
CC seborrheic dermatitis, nummular dermatitis, generalised exfoliative
CC dermatitis or eczema. The invention effectively modulates critical
CC costimulatory molecules such as the B7 protein. The present sequence
CC represents a human B7-1 targeted oligonucleotide.
XX
SQ Sequence 20 BP; 3 A; 4 C; 4 G; 9 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 2.3e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

```
Qy       1317 TTGAGTTTCAAAGGTTGCTG 1336
              || ||||||| || ||||||
Db          1 TTTAGTTTCACAGCTTGCTG 20
```

RESULT 265
ADE27991/c
ID ADE27991 standard; DNA; 20 BP.
XX
AC ADE27991;
XX
DT 29-JAN-2004 (first entry)
XX
DE Human B7-1 targeted oligonucleotide SEQ ID 253.
XX
KW ss; human; B7-1; inflammatory skin disorder; antisense; psoriasis;
KW contact dermatitis; atopic dermatitis; seborrheic dermatitis;
KW nummular dermatitis; generalised exfoliative dermatitis; eczema;
KW critical costimulatory molecule.
XX
OS Synthetic.
OS Homo sapiens.
XX
PN US2003176374-A1.
XX
PD 18-SEP-2003.
XX
PF 09-MAY-2001; 2001US-00851871.
XX
PR 31-DEC-1996; 96US-00777266.
PR 04-JUN-1999; 99US-00326186.
PR 25-MAY-2000; 2000WO-US014471.
XX
PA (BENN/) BENNETT C F.
PA (VICK/) VICKERS T A.
PA (KARR/) KARRAS J G.
XX
PI Bennett CF, Vickers TA, Karras JG;
XX
DR WPI; 2003-863863/80.
XX
PT Treating an inflammatory skin disorder such as psoriasis comprises
PT topically applying an antisense compound targeted to the nucleic acid
PT encoding human B7 protein.
XX
PS Example 19; SEQ ID NO 253; 88pp; English.
XX
CC The invention relates to a method of treating an inflammatory skin
CC disorder in an individual by topically applying an antisense compound
CC targeted to a nucleic acid molecule encoding a human B7 protein. The
CC invention is for treating an inflammatory skin disorder in individual.
CC The skin disorder is psoriasis, contact dermatitis, atopic dermatitis,
CC seborrheic dermatitis, nummular dermatitis, generalised exfoliative
CC dermatitis or eczema. The invention effectively modulates critical
CC costimulatory molecules such as the B7 protein. The present sequence
CC represents a human B7-1 targeted oligonucleotide.
XX
SQ Sequence 20 BP; 7 A; 4 C; 8 G; 1 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 2.3e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

```
Qy       3767 GGCTGGGATCCCTCCCCTGT 3786
              |||||| ||||||| ||| |
Db         20 GGCTGGCATCCCTCTCCTTT 1
```

RESULT 266
ADF43774/c
ID ADF43774 standard; DNA; 20 BP.
XX
AC ADF43774;
XX
DT 12-FEB-2004 (first entry)
XX
DE HPV 33 detecting probe M3305.
XX
KW detection; human papillomavirus; HPV subtype; probe; ss.
XX
OS Human papillomavirus type 33.
XX
PN JP2002360271-A.
XX
PD 17-DEC-2002.
XX
PF 28-NOV-2001; 2001JP-00362595.
XX
PR 04-MAY-2001; 2001TW-00110785.
XX
PA (KING-) KING CAR FOOD IND CO LTD.
XX
DR WPI; 2003-600935/57.
XX
PT A detecting apparatus and a detecting method for identifying the subtypes
PT of many species of human papilloma viruses at the same time and a

```
PT   composition for the detection.
XX
PS   Claim 1; SEQ ID NO 131; 166pp; Japanese.
XX
CC   This invention describes a novel detecting apparatus for identifying the
CC   subtypes of human papillomaviruses (HPV) contained in a sample which
CC   comprises a carrier which can load sample, a first oligonucleotide loaded
CC   on first part of the carrier and a second oligonucleotide loaded on
CC   second part of carrier, in which first and second oligonucleotides
CC   hybridise with the DNA of the first and the second HPV subtype and can
CC   identify HPV subtype contained in sample at the same time. ADF43644-
CC   ADF44289 represent oligonucleotide probes used in the method of the
CC   invention.
XX
SQ   Sequence 20 BP; 12 A; 1 C; 2 G; 5 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 15.2;  DB 1;  Length 20;
  Best Local Similarity   85.0%;  Pred. No. 2.3e+02;
  Matches   17;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       3304 ATTTTTATTTTTATATATCC 3323
              ||||| |||||||||| | |
Db         20 ATTTTCATTTTTATATGTAC 1


RESULT 267
ADF43935/c
ID   ADF43935 standard; DNA; 20 BP.
XX
AC   ADF43935;
XX
DT   12-FEB-2004  (first entry)
XX
DE   HPV 52 detecting probe M5206.
XX
KW   detection; human papillomavirus; HPV subtype; probe; ss.
XX
OS   Human papillomavirus type 52.
XX
PN   JP2002360271-A.
XX
PD   17-DEC-2002.
XX
PF   28-NOV-2001; 2001JP-00362595.
XX
PR   04-MAY-2001; 2001TW-00110785.
XX
PA   (KING-) KING CAR FOOD IND CO LTD.
XX
DR   WPI; 2003-600935/57.
XX
PT   A detecting apparatus and a detecting method for identifying the subtypes
PT   of many species of human papilloma viruses at the same time and a
PT   composition for the detection.
XX
PS   Claim 1; SEQ ID NO 292; 166pp; Japanese.
XX
CC   This invention describes a novel detecting apparatus for identifying the
CC   subtypes of human papillomaviruses (HPV) contained in a sample which
CC   comprises a carrier which can load sample, a first oligonucleotide loaded
CC   on first part of the carrier and a second oligonucleotide loaded on
CC   second part of carrier, in which first and second oligonucleotides
CC   hybridise with the DNA of the first and the second HPV subtype and can
CC   identify HPV subtype contained in sample at the same time. ADF43644-
CC   ADF44289 represent oligonucleotide probes used in the method of the
CC   invention.
XX
SQ   Sequence 20 BP; 12 A; 2 C; 2 G; 4 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 15.2;  DB 1;  Length 20;
  Best Local Similarity   85.0%;  Pred. No. 2.3e+02;
  Matches   17;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       3304 ATTTTTATTTTTATATATCC 3323
              ||||| |||||||||| | |
Db         20 ATTTTCATTTTTATATGTGC 1


RESULT 268
ADF88065/c
ID   ADF88065 standard; DNA; 20 BP.
XX
AC   ADF88065;
XX
DT   26-FEB-2004  (first entry)
XX
DE   Single nucleotide polymorphism detection primer, SEQ ID No 1648.
XX
KW   human; single nucleotide polymorphism; microarray; side effect; ss;
KW   primer; PCR.
XX
OS   Synthetic.
OS   Homo sapiens.
XX
PN   JP2003235571-A.
XX
PD   26-AUG-2003.
XX
PF   12-FEB-2002; 2002JP-00034717.
XX
PR   12-FEB-2002; 2002JP-00034717.
XX
PA   (KAGA-) KAGAKU GIJUTSU SHINKO JIGYODAN.
XX
DR   WPI; 2003-820454/77.
XX
PT   Novel polynucleotide useful for detecting single nucleotide polymorphisms
PT   in human gene.
XX
PS   Claim 2; SEQ ID NO 1648; 704pp; Japanese.
XX
CC   The invention relates to a novel polynucleotide isolated and purified
CC   from a human gene having any one of 935 fully defined sequences as given
CC   in specification, or a sequence having a base substitution. The invention
CC   further relates to: an oligonucleotide containing single nucleotide
CC   polymorphisms; a PCR primer set chosen from the combination of two DNA
CC   fragments from any one of 1220 fully defined sequences as given in
CC   specification; a labelling probe containing the SNP containing oligo; and
CC   a microarray equipped with the SNP containing oligo. The isolated human
CC   gene of the invention is useful for detecting the single nucleotide
CC   polymorphisms in human gene. The isolated human gene is also useful for
CC   diagnosis of disease and determination of side effect to a medical agent.
CC   The isolated human gene is also effective in detecting single nucleotide
CC   polymorphisms in a human gene. This polynucleotide sequence represents
CC   one of the PCR primers used in the single nucleotide polymorphism
CC   detection method of the invention.
XX
SQ   Sequence 20 BP; 5 A; 9 C; 2 G; 4 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 15.2;  DB 1;  Length 20;
  Best Local Similarity   85.0%;  Pred. No. 2.3e+02;
  Matches   17;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       2774 CAGGCCTTATGCTAAGGGTG 2793
              ||||| |||||  |||||||
Db         20 CAGGCTTTATGGGAAGGGTG 1


RESULT 269
ABZ94003/c
ID   ABZ94003 standard; DNA; 20 BP.
XX
AC   ABZ94003;
XX
DT   17-OCT-2003  (first entry)
XX
```

DE Human oligonucleotide sequence.
XX
KW Human; antisense; lung dysfunction; nasal airway dysfunction;
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW lung inflammation; respiratory disease; ds.
XX
OS Homo sapiens.
XX
PN WO200285308-A2.
XX
PD 31-OCT-2002.
XX
PF 23-APR-2002; 2002WO-US013135.
XX
PR 24-APR-2001; 2001US-0286137P.
XX
PA (EPIG-) EPIGENESIS PHARM INC.
XX
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
DR WPI; 2003-229219/22.
XX
PT Pharmaceutical composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisense to specific gene(s) or its
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT ubiquinone.
XX
PS Disclosure; SEQ ID NO 9245; 872pp; English.
XX
CC The invention relates to a novel pharmaceutical composition, which has a
CC first active agent comprising an oligonucleotide antisense to the
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC antiinflammatory steroid and ubiquinone. A composition of the invention
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
CC immunosuppressive, and cytostatic activity. The composition may have a
CC use in antisense gene therapy. The composition is useful for treating or
CC preventing a respiratory, lung or malignant disease or condition, also
CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC receptor, producing bronchodilation, increasing levels of ubiquinone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 20 BP; 4 A; 2 C; 2 G; 12 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 2.3e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

```
Qy       1828 ACATAATGACTTCCAAAAAA 1847
              | |||||||||||  |||||
Db         20 AAATAATGACTTCAGAAAAA 1
```

RESULT 270
ABZ86103/c
ID ABZ86103 standard; DNA; 20 BP.
XX
AC ABZ86103;
XX
DT 17-OCT-2003 (first entry)
XX

DE Human oligonucleotide sequence.
XX
KW Human; antisense; lung dysfunction; nasal airway dysfunction;
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW lung inflammation; respiratory disease; ds.
XX
OS Homo sapiens.
XX
PN WO200285308-A2.
XX
PD 31-OCT-2002.
XX
PF 23-APR-2002; 2002WO-US013135.
XX
PR 24-APR-2001; 2001US-0286137P.
XX
PA (EPIG-) EPIGENESIS PHARM INC.
XX
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
DR WPI; 2003-229219/22.
XX
PT Pharmaceutical composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisense to specific gene(s) or its
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT ubiquinone.
XX
PS Claim 15; SEQ ID NO 1345; 872pp; English.
XX
CC The invention relates to a novel pharmaceutical composition, which has a
CC first active agent comprising an oligonucleotide antisense to the
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC antiinflammatory steroid and ubiquinone. A composition of the invention
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
CC immunosuppressive, and cytostatic activity. The composition may have a
CC use in antisense gene therapy. The composition is useful for treating or
CC preventing a respiratory, lung or malignant disease or condition, also
CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC receptor, producing bronchodilation, increasing levels of ubiquinone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 20 BP; 10 A; 1 C; 3 G; 6 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 2.3e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

```
Qy       3265 TCGAACATGTTCTATTTTTT 3284
              || |||||| | ||||||||
Db         20 TCAAACATGCTATATTTTTT 1
```

RESULT 271
ABZ89062/c
ID ABZ89062 standard; DNA; 20 BP.
XX
AC ABZ89062;
XX
DT 17-OCT-2003 (first entry)
XX

DE Human oligonucleotide sequence.
XX
KW Human; antisense; lung dysfunction; nasal airway dysfunction;
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW lung inflammation; respiratory disease; ds.
XX
OS Homo sapiens.
XX
PN WO200285308-A2.
XX
PD 31-OCT-2002.
XX
PF 23-APR-2002; 2002WO-US013135.
XX
PR 24-APR-2001; 2001US-0286137P.
XX
PA (EPIG-) EPIGENESIS PHARM INC.
XX
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
DR WPI; 2003-229219/22.
XX
PT Pharmaceutical composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisense to specific gene(s) or its
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT ubiquinone.
XX
PS Disclosure; SEQ ID NO 4304; 872pp; English.
XX
CC The invention relates to a novel pharmaceutical composition, which has a
CC first active agent comprising an oligonucleotide antisense to the
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC antiinflammatory steroid and ubiquinone. A composition of the invention
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
CC immunosuppressive, and cytostatic activity. The composition may have a
CC use in antisense gene therapy. The composition is useful for treating or
CC preventing a respiratory, lung or malignant disease or condition, also
CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC receptor, producing bronchodilation, increasing levels of ubiquinone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 20 BP; 5 A; 8 C; 4 G; 3 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 2.3e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 2569 TGGGGCGGCACATCTTCTGG 2588
|||||| |||||| |||||
Db 20 TGGGGCTGCACATAGTCTGG 1

RESULT 272
ABZ91585/c
ID ABZ91585 standard; DNA; 20 BP.
XX
AC ABZ91585;
XX
DT 17-OCT-2003 (first entry)
XX

DE Human oligonucleotide sequence.
XX
KW Human; antisense; lung dysfunction; nasal airway dysfunction;
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW lung inflammation; respiratory disease; ds.
XX
OS Homo sapiens.
XX
PN WO200285308-A2.
XX
PD 31-OCT-2002.
XX
PF 23-APR-2002; 2002WO-US013135.
XX
PR 24-APR-2001; 2001US-0286137P.
XX
PA (EPIG-) EPIGENESIS PHARM INC.
XX
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
DR WPI; 2003-229219/22.
XX
PT Pharmaceutical composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisense to specific gene(s) or its
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT ubiquinone.
XX
PS Disclosure; SEQ ID NO 6827; 872pp; English.
XX
CC The invention relates to a novel pharmaceutical composition, which has a
CC first active agent comprising an oligonucleotide antisense to the
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC antiinflammatory steroid and ubiquinone. A composition of the invention
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
CC immunosuppressive, and cytostatic activity. The composition may have a
CC use in antisense gene therapy. The composition is useful for treating or
CC preventing a respiratory, lung or malignant disease or condition, also
CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC receptor, producing bronchodilation, increasing levels of ubiquinone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 20 BP; 9 A; 3 C; 2 G; 6 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 2.3e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 1173 TTAGTTAACTGTAAATTTGG 1192
||| ||||| ||| ||||||
Db 20 TTATTTAACAGTACATTTGG 1

RESULT 273
ABZ91732/c
ID ABZ91732 standard; DNA; 20 BP.
XX
AC ABZ91732;
XX
DT 17-OCT-2003 (first entry)
XX

DE Human oligonucleotide sequence.
XX
KW Human; antisense; lung dysfunction; nasal airway dysfunction;
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW lung inflammation; respiratory disease; ds.
XX
OS Homo sapiens.
XX
PN WO200285308-A2.
XX
PD 31-OCT-2002.
XX
PF 23-APR-2002; 2002WO-US013135.
XX
PR 24-APR-2001; 2001US-0286137P.
XX
PA (EPIG-) EPIGENESIS PHARM INC.
XX
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
DR WPI; 2003-229219/22.
XX
PT Pharmaceutical composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisense to specific gene(s) or its
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT ubiquinone.
XX
PS Disclosure; SEQ ID NO 6974; 872pp; English.
XX
CC The invention relates to a novel pharmaceutical composition, which has a
CC first active agent comprising an oligonucleotide antisense to the
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC antiinflammatory steroid and ubiquinone. A composition of the invention
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
CC immunosuppressive, and cytostatic activity. The composition may have a
CC use in antisense gene therapy. The composition is useful for treating or
CC preventing a respiratory, lung or malignant disease or condition, also
CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC receptor, producing bronchodilation, increasing levels of ubiquinone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 20 BP; 11 A; 0 C; 1 G; 8 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 2.3e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

```
Qy       3300 ATATATTTTTATTTTTATAT 3319
              ||||||||| || | |||||
Db         20 ATATATTTTCATATATATAT 1
```

RESULT 274
ABZ91733/c
ID ABZ91733 standard; DNA; 20 BP.
XX
AC ABZ91733;
XX
DT 17-OCT-2003 (first entry)
XX

DE Human oligonucleotide sequence.
XX
KW Human; antisense; lung dysfunction; nasal airway dysfunction;
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW lung inflammation; respiratory disease; ds.
XX
OS Homo sapiens.
XX
PN WO200285308-A2.
XX
PD 31-OCT-2002.
XX
PF 23-APR-2002; 2002WO-US013135.
XX
PR 24-APR-2001; 2001US-0286137P.
XX
PA (EPIG-) EPIGENESIS PHARM INC.
XX
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
DR WPI; 2003-229219/22.
XX
PT Pharmaceutical composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisense to specific gene(s) or its
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT ubiquinone.
XX
PS Disclosure; SEQ ID NO 6975; 872pp; English.
XX
CC The invention relates to a novel pharmaceutical composition, which has a
CC first active agent comprising an oligonucleotide antisense to the
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC antiinflammatory steroid and ubiquinone. A composition of the invention
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
CC immunosuppressive, and cytostatic activity. The composition may have a
CC use in antisense gene therapy. The composition is useful for treating or
CC preventing a respiratory, lung or malignant disease or condition, also
CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC receptor, producing bronchodilation, increasing levels of ubiquinone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 20 BP; 11 A; 0 C; 1 G; 8 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 2.3e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

```
Qy       3300 ATATATTTTTATTTTTATAT 3319
              |||||| | |||||| ||||
Db         20 ATATATATATATTTTCATAT 1
```

RESULT 275
ABZ98040/c
ID ABZ98040 standard; DNA; 20 BP.
XX
AC ABZ98040;
XX
DT 17-OCT-2003 (first entry)
XX

DE Human MCP4 oligonucleotide sequence.
XX
KW Human; antisense; lung dysfunction; nasal airway dysfunction;
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW lung inflammation; respiratory disease; ds.
XX
OS Homo sapiens.
XX
PN WO200285308-A2.
XX
PD 31-OCT-2002.
XX
PF 23-APR-2002; 2002WO-US013135.
XX
PR 24-APR-2001; 2001US-0286137P.
XX
PA (EPIG-) EPIGENESIS PHARM INC.
XX
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
DR WPI; 2003-229219/22.
XX
PT Pharmaceutical composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisense to specific gene(s) or its
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT ubiquinone.
XX
PS Disclosure; SEQ ID NO 13282; 872pp; English.
XX
CC The invention relates to a novel pharmaceutical composition, which has a
CC first active agent comprising an oligonucleotide antisense to the
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC antiinflammatory steroid and ubiquinone. A composition of the invention
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
CC immunosuppressive, and cytostatic activity. The composition may have a
CC use in antisense gene therapy. The composition is useful for treating or
CC preventing a respiratory, lung or malignant disease or condition, also
CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC receptor, producing bronchodilation, increasing levels of ubiquinone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 20 BP; 5 A; 6 C; 5 G; 4 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 2.3e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

```
Qy       3184 TCTCCTTACAGAGGTTAAAG 3203
              ||||||| |||||| | |||
Db         20 TCTCCTTGCAGAGGCTGAAG 1
```

RESULT 276
ABZ98571
ID ABZ98571 standard; DNA; 20 BP.
XX
AC ABZ98571;
XX
DT 17-OCT-2003 (first entry)
XX

DE Human ICAM oligonucleotide sequence.
XX
KW Human; antisense; lung dysfunction; nasal airway dysfunction;
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW lung inflammation; respiratory disease; ds.
XX
OS Homo sapiens.
XX
PN WO200285308-A2.
XX
PD 31-OCT-2002.
XX
PF 23-APR-2002; 2002WO-US013135.
XX
PR 24-APR-2001; 2001US-0286137P.
XX
PA (EPIG-) EPIGENESIS PHARM INC.
XX
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
DR WPI; 2003-229219/22.
XX
PT Pharmaceutical composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisense to specific gene(s) or its
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT ubiquinone.
XX
PS Disclosure; SEQ ID NO 13813; 872pp; English.
XX
CC The invention relates to a novel pharmaceutical composition, which has a
CC first active agent comprising an oligonucleotide antisense to the
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC antiinflammatory steroid and ubiquinone. A composition of the invention
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
CC immunosuppressive, and cytostatic activity. The composition may have a
CC use in antisense gene therapy. The composition is useful for treating or
CC preventing a respiratory, lung or malignant disease or condition, also
CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC receptor, producing bronchodilation, increasing levels of ubiquinone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 20 BP; 5 A; 3 C; 8 G; 4 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 2.3e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

```
Qy       3750 TTTAGGGAGACACAGATGGC 3769
              || |||| |||||||||| |
Db          1 TTGAGGGGGACACAGATGTC 20
```

RESULT 277
AAD52229/c
ID AAD52229 standard; DNA; 20 BP.
XX
AC AAD52229;
XX
DT 02-MAY-2003 (first entry)
XX

```
DE   Human IFNGR1 antisense oligonucleotide, ISIS 147645.
XX
KW   Human; interferon gamma receptor 1; IFNGR1; autoimmune disorder; cancer;
KW   diabetes; autoimmune thyroiditis; multiple sclerosis; immunosuppressive;
KW   infection; neuroprotective; inflammation; cytostatic; antisense therapy;
KW   autoimmune arthritis; autoimmune insulinitis; Crohn's disease; tumour;
KW   receptor; antisense; phosphorothioate backbone; ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base    1. .20
FT                    /*tag=  a
FT                    /mod_base= OTHER
FT                    /note= "Phosphorothioate backbone; All cytidine residues
FT                    are 5-methylcytidines"
FT   modified_base    1. .5
FT                    /*tag=  b
FT                    /mod_base= OTHER
FT                    /note= "2'methoxyethyl nucleotides"
FT   modified_base    16. .20
FT                    /*tag=  c
FT                    /mod_base= OTHER
FT                    /note= "2'methoxyethyl nucleotides"
XX
PN   WO200288162-A1.
XX
PD   07-NOV-2002.
XX
PF   16-APR-2002; 2002WO-US012006.
XX
PR   26-APR-2001; 2001US-00843376.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Bennett FC,  Watt AT;
XX
DR   WPI; 2003-156687/15.
XX
PT   New antisense oligonucleotides targeted to a nucleic acid molecule
PT   encoding interferon gamma receptor 1, useful for treating an autoimmune
PT   disorder, e.g. diabetes, multiple sclerosis or Crohn's disease, or
PT   cancer.
XX
PS   Claim 3; Page 85; 124pp; English.
XX
CC   The invention relates to antisense compounds, compositions and methods
CC   for modulating the expression of interferon gamma receptor 1 (IFNGR1).
CC   The compositions comprise antisense compounds, particularly antisense
CC   oligonucleotides, targetted to nucleic acids encoding IFNGR1. The
CC   antisense compound is useful for treating a disease or condition
CC   associated with IFNGR1, such as an autoimmune disorder (e.g. diabetes,
CC   autoimmune thyroiditis, multiple sclerosis, autoimmune arthritis,
CC   autoimmune insulinitis or Crohn's disease), cancer or a disease or
CC   condition caused by aberrant apoptosis. It is also used for inhibiting
CC   the expression of IFNGR1, as research reagents and diagnostics, to
CC   distinguish between functions of various members of a biological pathway,
CC   as prophylactic agents (e.g. to prevent or delay infection, inflammation
CC   or tumour formation), and as probes or primers. It is also used in
CC   antisense therapy. The present sequence is an antisense oligonucleotide
CC   targetted to human IFNGR1 DNA. This sequence is used in the
CC   exemplification of the invention
XX
SQ   Sequence 20 BP; 4 A; 5 C; 7 G; 4 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 15.2;  DB 1;  Length 20;
  Best Local Similarity   85.0%;  Pred. No. 2.3e+02;
  Matches   17;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1689 GAGCAGTTGTCTCCAACAGC 1708
              |||| |||||||||| || |
Db         20 GAGCCGTTGTCTCCAGCAAC 1
```

```
RESULT 278
ADA26894/c
ID   ADA26894 standard; DNA; 20 BP.
XX
AC   ADA26894;
XX
DT   20-NOV-2003  (first entry)
XX
DE   Human PRL-3 reverse PCR primer #178, used in gene mapping.
XX
KW   Metastasis; neoplastic growth; detection; prediction;
KW   neoplastic growth marker; drug screening; cancer; tumour;
KW   gastrointestinal; prostate; breast; colorectal; diagnostic imaging;
KW   drug targeting; chromosome 8q24.3; human;
KW   protein tyrosine phosphatase type IVA member 3; PRL-3; gene mapping;
KW   cytostatic; PCR; primer; ss.
XX
OS   Homo sapiens.
XX
PN   WO2003031930-A2.
XX
PD   17-APR-2003.
XX
PF   02-OCT-2002; 2002WO-US031247.
XX
PR   09-OCT-2001; 2001US-0327332P.
XX
PA   (UYJO ) UNIV JOHNS HOPKINS.
XX
PI   Vogelstein B,  Kinzler KW,  Saha S,  Bardelli A;
XX
DR   WPI; 2003-393457/37.
XX
PT   Identifying regions of neoplastic growth in a human body, useful for
PT   detecting or predicting metastasis, comprises administering to the human
PT   body an antibody or peptide that specifically binds to a protein marker
PT   of neoplastic growth.
XX
PS   Disclosure; Page 23; 42pp; English.
XX
CC   The invention relates to methods for identifying regions of neoplastic
CC   growth in a human patient, especially for detecting or predicting
CC   metastasis. The methods involve determining whether a neoplastic growth
CC   marker protein is overexpressed, either by the use of an antibody
CC   specific for the protein, or by the use of PCR or hybridisation to detect
CC   nucleic acids encoding the marker proteins. A set of neoplastic growth
CC   markers are disclosed (SAGE (serial analysis of gene expression) tags for
CC   these are given in ADA26759-ADA26796), with protein tyrosine phosphatase
CC   type IVA member 3 (also known as PRL-3) being a preferred neoplastic
CC   growth marker. The neoplastic growth markers are specifically expressed
CC   at a higher level in metastatic cancers, compared with advanced and early
CC   stage cancers and normal cells from which the cancer is derived.
CC   Overexpression of the neoplastic growth markers is taken as an indication
CC   that the tissue has a propensity to metastasise. The invention also
CC   encompasses methods for treating a patient with an advanced or metastatic
CC   cancer, and for identifying candidate drugs for treating advanced or
CC   metastatic cancers. The methods of the invention are useful for
CC   identifying regions of neoplastic growth, for detecting or predicting
CC   metastasis, or identifying candidate drugs for treating advanced or
CC   metastatic cancers. The invention is particularly applicable to
CC   gastrointestinal, prostate, breast or colorectal cancers. Antibodies
CC   which bind to the neoplastic growth marker proteins are additionally
CC   useful for diagnostic imaging and for targeting cytotoxic or
CC   chemotherapeutic drugs. The present sequence represents a PCR primer used
CC   to map the PRL-3 gene to chromosome 8q24.3.
XX
SQ   Sequence 20 BP; 7 A; 6 C; 5 G; 2 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 15.2;  DB 1;  Length 20;
  Best Local Similarity   85.0%;  Pred. No. 2.3e+02;
  Matches   17;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;
```

```
Qy       2071 TGTCGGTCCTCAGTGTGCTT 2090
              |||| |||||||| | ||||
Db         20 TGTCTGTCCTCAGGGAGCTT 1
```

RESULT 279
ADL16109
ID ADL16109 standard; DNA; 20 BP.
XX
AC ADL16109;
XX
DT 06-MAY-2004 (first entry)
XX
DE Human lipoprotein lipase reverse PCR primer R0, SEQ ID NO:6.
XX
KW Human; lipoprotein lipase; LPL; polymorphism analysis;
KW single nucleotide polymorphism; SNP; diagnosis; genetic predisposition;
KW obesity; PCR; primer; ss.
XX
OS Homo sapiens.
XX
PN KR2002078511-A.
XX
PD 19-OCT-2002.
XX
PF 03-APR-2001; 2001KR-00017640.
XX
PR 03-APR-2001; 2001KR-00017640.
XX
PA (SEOU-) SEOULIN BIO SCI CO LTD.
XX
PI Jun GA, Kang BY, Kim GT, Lee JJ;
XX
DR WPI; 2003-338952/32.
XX
PT Primers useful for predicting the likelihood of obesity.
XX
PS Claim 1; SEQ ID NO 6; 7pp; Korean.
XX
CC The invention relates to PCR primers (ADL16104-ADL16111) for use in the
CC analysis of single nucleotide polymorphisms (SNPs) in the human
CC lipoprotein lipase (LPL) gene (GenBank accession numbers AF050163) which
CC are associated with a predisposition to obesity. The invention also
CC encompasses a kit comprising a pair of sense and antisense primers. The
CC primers and kit can be used to predict the likelihood of an individual
CC developing obesity, so that it can be prevented. The present sequence
CC represents a specifically claimed human LPL reverse PCR primer of the
CC invention.
XX
SQ Sequence 20 BP; 4 A; 6 C; 2 G; 8 T; 0 U; 0 Other;

```
  Query Match             0.4%;  Score 15.2;  DB 1;  Length 20;
  Best Local Similarity   85.0%;  Pred. No. 2.3e+02;
  Matches   17;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       2933 GAAAGTCATTTCAACTCTTA 2952
              || |||| ||||| ||||||
Db          1 GACAGTCTTTTCACCTCTTA 20
```

RESULT 280
ABD27815/c
ID ABD27815 standard; DNA; 20 BP.
XX
AC ABD27815;
XX
DT 29-JUL-2004 (first entry)
XX
DE AA102454-derived oligonucleotide SEQ ID 6827.
XX
KW Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
KW surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;
KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
KW pulmonary transplantation rejection; ss; primer.
XX
OS Homo sapiens.
XX
PN WO200285309-A2.
XX
PD 31-OCT-2002.
XX
PF 23-APR-2002; 2002WO-US013143.
XX
PR 24-APR-2001; 2001US-0286036P.
XX
PA (EPIG-) EPIGENESIS PHARM INC.
XX
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
DR WPI; 2003-093058/08.
XX
PT Pharmaceutical composition for treating asthma, has antisense
PT oligonucleotide containing less percentage of adenosine, targeted to
PT nucleic acids associated with lung airway or lung dysfunction, and
PT bronchodilating agent.
XX
PS Claim 15; SEQ ID NO 6827; 763pp; English.
XX
CC This invention describes a novel composition (a) a first active agent,
CC comprising oligonucleotides, effective for alleviating
CC bronchoconstriction, respiratory tract inflammation, allergies and
CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
CC surfactant depletion or hyposecretion, when administered to a mammal. The
CC oligonucleotides are derived from a gene encoding or regulating
CC expression of a target polypeptide associated with lung airway or lung
CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
CC The invention also describes a kit, that comprises: (a) a delivery
CC device, in separate containers, (b) the oligonucleotides, (c)
CC instructions for adding a carrier and for use of the kit. The composition
CC of the invention has antiallergic, antiinflammatory, antiasthmatic,
CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
CC beta-adrenergic agonist. The composition is useful for preventing or
CC treating a respiratory, lung or malignant disease. The administered
CC composition comprises oligo and is administered to reduce the production
CC or availability, or to increase the degradation of the target mRNA or to
CC reduce the amount of target polypeptide present in the lungs. The
CC pulmonary obstruction, and/or bronchoconstriction and/or lung
CC inflammation, allergies and/or surfactant hypoproduction are associated
CC with a disease or condition such as pulmonary vasoconstriction,
CC inflammation, allergies, asthma, impeded respiration, respiratory
CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
CC transplantation rejection, pulmonary infections, bronchitis or cancer.
CC The reduced adenosine content of the anti-sense oligos corresponding to
CC thymidines present in the target RNA serves to prevent the breakdown of
CC the oligonucleotides into products that free adenosine into the system
CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
CC prevent any unwanted effects due to it
XX
SQ Sequence 20 BP; 9 A; 3 C; 2 G; 6 T; 0 U; 0 Other;

```
  Query Match             0.4%;  Score 15.2;  DB 1;  Length 20;
  Best Local Similarity   85.0%;  Pred. No. 2.3e+02;
  Matches   17;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1173 TTAGTTAACTGTAAATTTGG 1192
              ||| ||||| ||| ||||||
Db         20 TTATTTAACAGTACATTTGG 1
```

```
RESULT 281
ABD22333/c
ID   ABD22333 standard; DNA; 20 BP.
XX
AC   ABD22333;
XX
DT   29-JUL-2004  (first entry)
XX
DE   Human cathepsin C-derived oligo SEQ ID 1345.
XX
KW   Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
KW   respiratory tract inflammation; adenosine sensitivity; lung; cancer;
KW   surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;
KW   analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
KW   beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
KW   respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
KW   emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
KW   pulmonary transplantation rejection; ss; primer.
XX
OS   Homo sapiens.
XX
PN   WO200285309-A2.
XX
PD   31-OCT-2002.
XX
PF   23-APR-2002; 2002WO-US013143.
XX
PR   24-APR-2001; 2001US-0286036P.
XX
PA   (EPIG-) EPIGENESIS PHARM INC.
XX
PI   Nyce JW,  Li Y,  Sandrasagra A,  Katz E,  Pabalan J,  Aguilar D;
PI   Miller S,  Tang L,  Shahabuddin S;
XX
DR   WPI; 2003-093058/08.
XX
PT   Pharmaceutical composition for treating asthma, has antisense
PT   oligonucleotide containing less percentage of adenosine, targeted to
PT   nucleic acids associated with lung airway or lung dysfunction, and
PT   bronchodilating agent.
XX
PS   Claim 15; SEQ ID NO 1345; 763pp; English.
XX
CC   This invention describes a novel composition (a) a first active agent,
CC   comprising oligonucleotides, effective for alleviating
CC   bronchoconstriction, respiratory tract inflammation, allergies and
CC   reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
CC   surfactant depletion or hyposecretion, when administered to a mammal. The
CC   oligonucleotides are derived from a gene encoding or regulating
CC   expression of a target polypeptide associated with lung airway or lung
CC   dysfunction or cancer and can be anti-sense to the corresponding mRNA.
CC   The invention also describes a kit, that comprises: (a) a delivery
CC   device, in separate containers, (b) the oligonucleotides, (c)
CC   instructions for adding a carrier and for use of the kit. The composition
CC   of the invention has antiallergic, antiinflammatory, antiasthmatic,
CC   analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
CC   beta-adrenergic agonist. The composition is useful for preventing or
CC   treating a respiratory, lung or malignant disease. The administered
CC   composition comprises oligo and is administered to reduce the production
CC   or availability, or to increase the degradation of the target mRNA or to
CC   reduce the amount of target polypeptide present in the lungs. The
CC   pulmonary obstruction, and/or bronchoconstriction and/or lung
CC   inflammation, allergies and/or surfactant hypoproduction are associated
CC   with a disease or condition such as pulmonary vasoconstriction,
CC   inflammation, allergies, asthma, impeded respiration, respiratory
CC   distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
CC   hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
CC   transplantation rejection, pulmonary infections, bronchitis or cancer.
CC   The reduced adenosine content of the anti-sense oligos corresponding to
CC   thymidines present in the target RNA serves to prevent the breakdown of
CC   the oligonucleotides into products that free adenosine into the system
CC   e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
CC   prevent any unwanted effects due to it
XX
SQ   Sequence 20 BP; 10 A; 1 C; 3 G; 6 T; 0 U; 0 Other;

  Query Match              0.4%;  Score 15.2;  DB 1;  Length 20;
  Best Local Similarity   85.0%;  Pred. No. 2.3e+02;
  Matches   17;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       3265 TCGAACATGTTCTATTTTTT 3284
                || |||||| | ||||||||
Db         20 TCAAACATGCTATATTTTTT 1


RESULT 282
ABD31071/c
ID   ABD31071 standard; DNA; 20 BP.
XX
AC   ABD31071;
XX
DT   29-JUL-2004  (first entry)
XX
DE   Human MCP4-derived oligonucleotide SEQ ID 13282.
XX
KW   Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
KW   respiratory tract inflammation; adenosine sensitivity; lung; cancer;
KW   surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;
KW   analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
KW   beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
KW   respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
KW   emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
KW   pulmonary transplantation rejection; ss; primer.
XX
OS   Homo sapiens.
XX
PN   WO200285309-A2.
XX
PD   31-OCT-2002.
XX
PF   23-APR-2002; 2002WO-US013143.
XX
PR   24-APR-2001; 2001US-0286036P.
XX
PA   (EPIG-) EPIGENESIS PHARM INC.
XX
PI   Nyce JW,  Li Y,  Sandrasagra A,  Katz E,  Pabalan J,  Aguilar D;
PI   Miller S,  Tang L,  Shahabuddin S;
XX
DR   WPI; 2003-093058/08.
XX
PT   Pharmaceutical composition for treating asthma, has antisense
PT   oligonucleotide containing less percentage of adenosine, targeted to
PT   nucleic acids associated with lung airway or lung dysfunction, and
PT   bronchodilating agent.
XX
PS   Claim 15; SEQ ID NO 13282; 763pp; English.
XX
CC   This invention describes a novel composition (a) a first active agent,
CC   comprising oligonucleotides, effective for alleviating
CC   bronchoconstriction, respiratory tract inflammation, allergies and
CC   reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
CC   surfactant depletion or hyposecretion, when administered to a mammal. The
CC   oligonucleotides are derived from a gene encoding or regulating
CC   expression of a target polypeptide associated with lung airway or lung
CC   dysfunction or cancer and can be anti-sense to the corresponding mRNA.
CC   The invention also describes a kit, that comprises: (a) a delivery
CC   device, in separate containers, (b) the oligonucleotides, (c)
CC   instructions for adding a carrier and for use of the kit. The composition
CC   of the invention has antiallergic, antiinflammatory, antiasthmatic,
CC   analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
CC   beta-adrenergic agonist. The composition is useful for preventing or
CC   treating a respiratory, lung or malignant disease. The administered
CC   composition comprises oligo and is administered to reduce the production
CC   or availability, or to increase the degradation of the target mRNA or to
CC   reduce the amount of target polypeptide present in the lungs. The
```

```
CC   pulmonary obstruction, and/or bronchoconstriction and/or lung
CC   inflammation, allergies and/or surfactant hypoproduction are associated
CC   with a disease or condition such as pulmonary vasoconstriction,
CC   inflammation, allergies, asthma, impeded respiration, respiratory
CC   distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
CC   hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
CC   transplantation rejection, pulmonary infections, bronchitis or cancer.
CC   The reduced adenosine content of the anti-sense oligos corresponding to
CC   thymidines present in the target RNA serves to prevent the breakdown of
CC   the oligonucleotides into products that free adenosine into the system
CC   e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
CC   prevent any unwanted effects due to it
XX
SQ   Sequence 20 BP; 5 A; 6 C; 5 G; 4 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 15.2;  DB 1;  Length 20;
  Best Local Similarity   85.0%;  Pred. No. 2.3e+02;
  Matches   17;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       3184 TCTCCTTACAGAGGTTAAAG 3203
              ||||||| |||||| | |||
Db         20 TCTCCTTGCAGAGGCTGAAG 1


RESULT 283
ABD31602
ID   ABD31602 standard; DNA; 20 BP.
XX
AC   ABD31602;
XX
DT   29-JUL-2004  (first entry)
XX
DE   Human ICAM-derived oligonucleotide SEQ ID 13813.
XX
KW   Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
KW   respiratory tract inflammation; adenosine sensitivity; lung; cancer;
KW   surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;
KW   analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
KW   beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
KW   respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
KW   emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
KW   pulmonary transplantation rejection; ss; primer.
XX
OS   Homo sapiens.
XX
PN   WO200285309-A2.
XX
PD   31-OCT-2002.
XX
PF   23-APR-2002; 2002WO-US013143.
XX
PR   24-APR-2001; 2001US-0286036P.
XX
PA   (EPIG-) EPIGENESIS PHARM INC.
XX
PI   Nyce JW,  Li Y,  Sandrasagra A,  Katz E,  Pabalan J,  Aguilar D;
PI   Miller S,  Tang L,  Shahabuddin S;
XX
DR   WPI; 2003-093058/08.
XX
PT   Pharmaceutical composition for treating asthma, has antisense
PT   oligonucleotide containing less percentage of adenosine, targeted to
PT   nucleic acids associated with lung airway or lung dysfunction, and
PT   bronchodilating agent.
XX
PS   Claim 15; SEQ ID NO 13813; 763pp; English.
XX
CC   This invention describes a novel composition (a) a first active agent,
CC   comprising oligonucleotides, effective for alleviating
CC   bronchoconstriction, respiratory tract inflammation, allergies and
CC   reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
CC   surfactant depletion or hyposecretion, when administered to a mammal. The
CC   oligonucleotides are derived from a gene encoding or regulating
CC   expression of a target polypeptide associated with lung airway or lung
CC   dysfunction or cancer and can be anti-sense to the corresponding mRNA.
CC   The invention also describes a kit, that comprises: (a) a delivery
CC   device, in separate containers, (b) the oligonucleotides, (c)
CC   instructions for adding a carrier and for use of the kit. The composition
CC   of the invention has antiallergic, antiinflammatory, antiasthmatic,
CC   analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
CC   beta-adrenergic agonist. The composition is useful for preventing or
CC   treating a respiratory, lung or malignant disease. The administered
CC   composition comprises oligo and is administered to reduce the production
CC   or availability, or to increase the degradation of the target mRNA or to
CC   reduce the amount of target polypeptide present in the lungs. The
CC   pulmonary obstruction, and/or bronchoconstriction and/or lung
CC   inflammation, allergies and/or surfactant hypoproduction are associated
CC   with a disease or condition such as pulmonary vasoconstriction,
CC   inflammation, allergies, asthma, impeded respiration, respiratory
CC   distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
CC   hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
CC   transplantation rejection, pulmonary infections, bronchitis or cancer.
CC   The reduced adenosine content of the anti-sense oligos corresponding to
CC   thymidines present in the target RNA serves to prevent the breakdown of
CC   the oligonucleotides into products that free adenosine into the system
CC   e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
CC   prevent any unwanted effects due to it
XX
SQ   Sequence 20 BP; 5 A; 3 C; 8 G; 4 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 15.2;  DB 1;  Length 20;
  Best Local Similarity   85.0%;  Pred. No. 2.3e+02;
  Matches   17;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       3750 TTTAGGGAGACACAGATGGC 3769
              || |||| |||||||||| |
Db          1 TTGAGGGGGACACAGATGTC 20


RESULT 284
ABD30233/c
ID   ABD30233 standard; DNA; 20 BP.
XX
AC   ABD30233;
XX
DT   29-JUL-2004  (first entry)
XX
DE   AA284245-derived oligonucleotide SEQ ID 9245.
XX
KW   Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
KW   respiratory tract inflammation; adenosine sensitivity; lung; cancer;
KW   surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;
KW   analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
KW   beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
KW   respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
KW   emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
KW   pulmonary transplantation rejection; ss; primer.
XX
OS   Homo sapiens.
XX
PN   WO200285309-A2.
XX
PD   31-OCT-2002.
XX
PF   23-APR-2002; 2002WO-US013143.
XX
PR   24-APR-2001; 2001US-0286036P.
XX
PA   (EPIG-) EPIGENESIS PHARM INC.
XX
PI   Nyce JW,  Li Y,  Sandrasagra A,  Katz E,  Pabalan J,  Aguilar D;
PI   Miller S,  Tang L,  Shahabuddin S;
XX
DR   WPI; 2003-093058/08.
XX
PT   Pharmaceutical composition for treating asthma, has antisense
```

PT oligonucleotide containing less percentage of adenosine, targeted to
PT nucleic acids associated with lung airway or lung dysfunction, and
PT bronchodilating agent.
XX
PS Claim 15; SEQ ID NO 9245; 763pp; English.
XX
CC This invention describes a novel composition (a) a first active agent,
CC comprising oligonucleotides, effective for alleviating
CC bronchoconstriction, respiratory tract inflammation, allergies and
CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
CC surfactant depletion or hyposecretion, when administered to a mammal. The
CC oligonucleotides are derived from a gene encoding or regulating
CC expression of a target polypeptide associated with lung airway or lung
CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
CC The invention also describes a kit, that comprises: (a) a delivery
CC device, in separate containers, (b) the oligonucleotides, (c)
CC instructions for adding a carrier and for use of the kit. The composition
CC of the invention has antiallergic, antiinflammatory, antiasthmatic,
CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
CC beta-adrenergic agonist. The composition is useful for preventing or
CC treating a respiratory, lung or malignant disease. The administered
CC composition comprises oligo and is administered to reduce the production
CC or availability, or to increase the degradation of the target mRNA or to
CC reduce the amount of target polypeptide present in the lungs. The
CC pulmonary obstruction, and/or bronchoconstriction and/or lung
CC inflammation, allergies and/or surfactant hypoproduction are associated
CC with a disease or condition such as pulmonary vasoconstriction,
CC inflammation, allergies, asthma, impeded respiration, respiratory
CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
CC transplantation rejection, pulmonary infections, bronchitis or cancer.
CC The reduced adenosine content of the anti-sense oligos corresponding to
CC thymidines present in the target RNA serves to prevent the breakdown of
CC the oligonucleotides into products that free adenosine into the system
CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
CC prevent any unwanted effects due to it
XX
SQ Sequence 20 BP; 4 A; 2 C; 2 G; 12 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 2.3e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

```
Qy       1828 ACATAATGACTTCCAAAAAA 1847
              | |||||||||||  |||||
Db         20 AAATAATGACTTCAGAAAAA 1
```

RESULT 285
ABD27963/c
ID ABD27963 standard; DNA; 20 BP.
XX
AC ABD27963;
XX
DT 29-JUL-2004 (first entry)
XX
DE AA497002-derived oligonucleotide SEQ ID 6975.
XX
KW Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
KW surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;
KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
KW pulmonary transplantation rejection; ss; primer.
XX
OS Homo sapiens.
XX
PN WO200285309-A2.
XX
PD 31-OCT-2002.
XX
PF 23-APR-2002; 2002WO-US013143.
XX
PR 24-APR-2001; 2001US-0286036P.
XX
PA (EPIG-) EPIGENESIS PHARM INC.
XX
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
DR WPI; 2003-093058/08.
XX
PT Pharmaceutical composition for treating asthma, has antisense
PT oligonucleotide containing less percentage of adenosine, targeted to
PT nucleic acids associated with lung airway or lung dysfunction, and
PT bronchodilating agent.
XX
PS Claim 15; SEQ ID NO 6975; 763pp; English.
XX
CC This invention describes a novel composition (a) a first active agent,
CC comprising oligonucleotides, effective for alleviating
CC bronchoconstriction, respiratory tract inflammation, allergies and
CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
CC surfactant depletion or hyposecretion, when administered to a mammal. The
CC oligonucleotides are derived from a gene encoding or regulating
CC expression of a target polypeptide associated with lung airway or lung
CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
CC The invention also describes a kit, that comprises: (a) a delivery
CC device, in separate containers, (b) the oligonucleotides, (c)
CC instructions for adding a carrier and for use of the kit. The composition
CC of the invention has antiallergic, antiinflammatory, antiasthmatic,
CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
CC beta-adrenergic agonist. The composition is useful for preventing or
CC treating a respiratory, lung or malignant disease. The administered
CC composition comprises oligo and is administered to reduce the production
CC or availability, or to increase the degradation of the target mRNA or to
CC reduce the amount of target polypeptide present in the lungs. The
CC pulmonary obstruction, and/or bronchoconstriction and/or lung
CC inflammation, allergies and/or surfactant hypoproduction are associated
CC with a disease or condition such as pulmonary vasoconstriction,
CC inflammation, allergies, asthma, impeded respiration, respiratory
CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
CC transplantation rejection, pulmonary infections, bronchitis or cancer.
CC The reduced adenosine content of the anti-sense oligos corresponding to
CC thymidines present in the target RNA serves to prevent the breakdown of
CC the oligonucleotides into products that free adenosine into the system
CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
CC prevent any unwanted effects due to it
XX
SQ Sequence 20 BP; 11 A; 0 C; 1 G; 8 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 2.3e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

```
Qy       3300 ATATATTTTTATTTTTATAT 3319
              |||||| | |||||| ||||
Db         20 ATATATATATATTTTCATAT 1
```

RESULT 286
ABD25292/c
ID ABD25292 standard; DNA; 20 BP.
XX
AC ABD25292;
XX
DT 29-JUL-2004 (first entry)
XX
DE AI092429-derived oligonucleotide SEQ ID 4304.
XX
KW Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
KW surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;

KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
KW pulmonary transplantation rejection; ss; primer.
XX
OS Homo sapiens.
XX
PN WO200285309-A2.
XX
PD 31-OCT-2002.
XX
PF 23-APR-2002; 2002WO-US013143.
XX
PR 24-APR-2001; 2001US-0286036P.
XX
PA (EPIG-) EPIGENESIS PHARM INC.
XX
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
DR WPI; 2003-093058/08.
XX
PT Pharmaceutical composition for treating asthma, has antisense
PT oligonucleotide containing less percentage of adenosine, targeted to
PT nucleic acids associated with lung airway or lung dysfunction, and
PT bronchodilating agent.
XX
PS Claim 15; SEQ ID NO 4304; 763pp; English.
XX
CC This invention describes a novel composition (a) a first active agent,
CC comprising oligonucleotides, effective for alleviating
CC bronchoconstriction, respiratory tract inflammation, allergies and
CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
CC surfactant depletion or hyposecretion, when administered to a mammal. The
CC oligonucleotides are derived from a gene encoding or regulating
CC expression of a target polypeptide associated with lung airway or lung
CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
CC The invention also describes a kit, that comprises: (a) a delivery
CC device, in separate containers, (b) the oligonucleotides, (c)
CC instructions for adding a carrier and for use of the kit. The composition
CC of the invention has antiallergic, antiinflammatory, antiasthmatic,
CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
CC beta-adrenergic agonist. The composition is useful for preventing or
CC treating a respiratory, lung or malignant disease. The administered
CC composition comprises oligo and is administered to reduce the production
CC or availability, or to increase the degradation of the target mRNA or to
CC reduce the amount of target polypeptide present in the lungs. The
CC pulmonary obstruction, and/or bronchoconstriction and/or lung
CC inflammation, allergies and/or surfactant hypoproduction are associated
CC with a disease or condition such as pulmonary vasoconstriction,
CC inflammation, allergies, asthma, impeded respiration, respiratory
CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
CC transplantation rejection, pulmonary infections, bronchitis or cancer.
CC The reduced adenosine content of the anti-sense oligos corresponding to
CC thymidines present in the target RNA serves to prevent the breakdown of
CC the oligonucleotides into products that free adenosine into the system
CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
CC prevent any unwanted effects due to it
XX
SQ Sequence 20 BP; 5 A; 8 C; 4 G; 3 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 2.3e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

```
Qy       2569 TGGGGCGGCACATCTTCTGG 2588
              |||||| ||||||  |||||
Db         20 TGGGGCTGCACATAGTCTGG 1
```

RESULT 287

ABD27962/c
ID ABD27962 standard; DNA; 20 BP.
XX
AC ABD27962;
XX
DT 29-JUL-2004 (first entry)
XX
DE AA497002-derived oligonucleotide SEQ ID 6974.
XX
KW Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
KW surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;
KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
KW pulmonary transplantation rejection; ss; primer.
XX
OS Homo sapiens.
XX
PN WO200285309-A2.
XX
PD 31-OCT-2002.
XX
PF 23-APR-2002; 2002WO-US013143.
XX
PR 24-APR-2001; 2001US-0286036P.
XX
PA (EPIG-) EPIGENESIS PHARM INC.
XX
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
DR WPI; 2003-093058/08.
XX
PT Pharmaceutical composition for treating asthma, has antisense
PT oligonucleotide containing less percentage of adenosine, targeted to
PT nucleic acids associated with lung airway or lung dysfunction, and
PT bronchodilating agent.
XX
PS Claim 15; SEQ ID NO 6974; 763pp; English.
XX
CC This invention describes a novel composition (a) a first active agent,
CC comprising oligonucleotides, effective for alleviating
CC bronchoconstriction, respiratory tract inflammation, allergies and
CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
CC surfactant depletion or hyposecretion, when administered to a mammal. The
CC oligonucleotides are derived from a gene encoding or regulating
CC expression of a target polypeptide associated with lung airway or lung
CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
CC The invention also describes a kit, that comprises: (a) a delivery
CC device, in separate containers, (b) the oligonucleotides, (c)
CC instructions for adding a carrier and for use of the kit. The composition
CC of the invention has antiallergic, antiinflammatory, antiasthmatic,
CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
CC beta-adrenergic agonist. The composition is useful for preventing or
CC treating a respiratory, lung or malignant disease. The administered
CC composition comprises oligo and is administered to reduce the production
CC or availability, or to increase the degradation of the target mRNA or to
CC reduce the amount of target polypeptide present in the lungs. The
CC pulmonary obstruction, and/or bronchoconstriction and/or lung
CC inflammation, allergies and/or surfactant hypoproduction are associated
CC with a disease or condition such as pulmonary vasoconstriction,
CC inflammation, allergies, asthma, impeded respiration, respiratory
CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
CC transplantation rejection, pulmonary infections, bronchitis or cancer.
CC The reduced adenosine content of the anti-sense oligos corresponding to
CC thymidines present in the target RNA serves to prevent the breakdown of
CC the oligonucleotides into products that free adenosine into the system
CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
CC prevent any unwanted effects due to it
XX

```
SQ   Sequence 20 BP; 11 A; 0 C; 1 G; 8 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 15.2;  DB 1;  Length 20;
  Best Local Similarity   85.0%;  Pred. No. 2.3e+02;
  Matches   17;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       3300 ATATATTTTTATTTTTATAT 3319
              ||||||||| || | |||||
Db         20 ATATATTTTCATATATATAT 1


RESULT 288
ADG72071/c
ID   ADG72071 standard; DNA; 20 BP.
XX
AC   ADG72071;
XX
DT   11-MAR-2004  (first entry)
XX
DE   Human SREBP-1 antisense oligonucleotide ISIS 220068.
XX
KW   Sterol regulatory element-binding protein-1; SREBP-1; ss; human;
KW   antisense gene therapy;
KW   sterol regulatory element-binding transcription factor; SREBF;
KW   metabolic disorder; diabetes; cardiovascular disorder; atherosclerosis;
KW   hyperlipidaemia.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag=  b
FT                   /mod_base= OTHER
FT                   /note= "Phosphorothioate linkages. All cytidines are 5-
FT                   methylcytidines"
FT   modified_base   1. .5
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethtyl residues"
FT   modified_base   16. .20
FT                   /*tag=  c
FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethyl residues"
XX
PN   US2003224515-A1.
XX
PD   04-DEC-2003.
XX
PF   04-JUN-2002; 2002US-00161996.
XX
PR   04-JUN-2002; 2002US-00161996.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Freier SM,  Baker BF,  Dobie KW;
XX
DR   WPI; 2004-022079/02.
XX
PT   New compounds, particularly antisense oligonucleotides targeted to a
PT   nucleic acid encoding sterol regulatory element-binding protein-1, useful
PT   for treating diabetes, atherosclerosis or hyperlipidemia.
XX
PS   Example 15; SEQ ID NO 66; 112pp; English.
XX
CC   The invention relates to a compound 8-80 nucleobases in length targeted
CC   to, and which specifically hybridises with a nucleic acid molecule
CC   encoding sterol regulatory element-binding protein-1 (SREBP-1, also known
CC   as sterol regulatory element-binding transcription factor, SREBF), and
CC   inhibits the expression of SREBP-1, i.e. is an antisense oligonucleotide.
CC   Also included are a compound 8-80 nucleobases in length that specifically
CC   hybridises with at least an 8-nucleobase portion of an active site on a
CC   nucleic acid molecule encoding sterol regulatory element-binding protein-
CC   1, a composition comprising the compound and a carrier or diluent,
CC   inhibiting the expression of sterol regulatory element-binding protein-1
CC   in cells or tissues (by contacting the cells or tissues with the compound
CC   so that expression of sterol regulatory element-binding protein-1 is
CC   inhibited) and treating an animal having a disease or condition
CC   associated with sterol regulatory element-binding protein-1 by
CC   administering to the animal a therapeutic or prophylactic amount of the
CC   compound so that expression of sterol regulatory element-binding protein-
CC   1 is inhibited. The antisense oligonucleotide comprises at least one
CC   modified internucleoside linkage (preferably a phosphorothioate linkage),
CC   at least one modified sugar moiety (preferably 2'-O-methoxyethyl sugar
CC   moiety) or at least one modified nucleobase (preferably 5-
CC   methylcytosine). The compound, composition and methods are useful for
CC   treating a disease or condition associated with sterol regulatory element
CC   -binding protein-1, such as a metabolic disorder e.g. diabetes, or a
CC   cardiovascular disorder, e.g. atherosclerosis or hyperlipidaemia. They
CC   are also useful in research and diagnostics for modulating the expression
CC   of sterol regulatory element-binding protein-1. The present sequence is
CC   an antisense oligonucleotide targeting human SREBP-1.
XX
SQ   Sequence 20 BP; 3 A; 3 C; 7 G; 7 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 15.2;  DB 1;  Length 20;
  Best Local Similarity   85.0%;  Pred. No. 2.3e+02;
  Matches   17;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy          8 CACTGCTGCTCACAGAAGCA 27
              ||||||||  |||| |||||
Db         20 CACTGCTGTCCACAAAAGCA 1


RESULT 289
ADG72205
ID   ADG72205 standard; cDNA; 20 BP.
XX
AC   ADG72205;
XX
DT   11-MAR-2004  (first entry)
XX
DE   Human SREBP-1 target site #42.
XX
KW   Sterol regulatory element-binding protein-1; SREBP-1; ss; human;
KW   antisense gene therapy;
KW   sterol regulatory element-binding transcription factor; SREBF;
KW   metabolic disorder; diabetes; cardiovascular disorder; atherosclerosis;
KW   hyperlipidaemia.
XX
OS   Homo sapiens.
XX
PN   US2003224515-A1.
XX
PD   04-DEC-2003.
XX
PF   04-JUN-2002; 2002US-00161996.
XX
PR   04-JUN-2002; 2002US-00161996.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Freier SM,  Baker BF,  Dobie KW;
XX
DR   WPI; 2004-022079/02.
XX
PT   New compounds, particularly antisense oligonucleotides targeted to a
PT   nucleic acid encoding sterol regulatory element-binding protein-1, useful
PT   for treating diabetes, atherosclerosis or hyperlipidemia.
XX
PS   Example 16; SEQ ID NO 200; 112pp; English.
XX
CC   The invention relates to a compound 8-80 nucleobases in length targeted
CC   to, and which specifically hybridises with a nucleic acid molecule
CC   encoding sterol regulatory element-binding protein-1 (SREBP-1, also known
CC   as sterol regulatory element-binding transcription factor, SREBF), and
CC   inhibits the expression of SREBP-1, i.e. is an antisense oligonucleotide.
```

CC Also included are a compound 8-80 nucleobases in length that specifically
CC hybridises with at least an 8-nucleobase portion of an active site on a
CC nucleic acid molecule encoding sterol regulatory element-binding protein-
CC 1, a composition comprising the compound and a carrier or diluent,
CC inhibiting the expression of sterol regulatory element-binding protein-1
CC in cells or tissues (by contacting the cells or tissues with the compound
CC so that expression of sterol regulatory element-binding protein-1 is
CC inhibited) and treating an animal having a disease or condition
CC associated with sterol regulatory element-binding protein-1 by
CC administering to the animal a therapeutic or prophylactic amount of the
CC compound so that expression of sterol regulatory element-binding protein-
CC 1 is inhibited. The antisense oligonucleotide comprises at least one
CC modified internucleoside linkage (preferably a phosphorothioate linkage),
CC at least one modified sugar moiety (preferably 2'-O-methoxyethyl sugar
CC moiety) or at least one modified nucleobase (preferably 5-
CC methylcytosine). The compound, composition and methods are useful for
CC treating a disease or condition associated with sterol regulatory element
CC -binding protein-1, such as a metabolic disorder e.g. diabetes, or a
CC cardiovascular disorder, e.g. atherosclerosis or hyperlipidaemia. They
CC are also useful in research and diagnostics for modulating the expression
CC of sterol regulatory element-binding protein-1. The present sequence is a
CC human SREBP-1 target region for the antisense oligonucleotides.
XX
SQ Sequence 20 BP; 7 A; 7 C; 3 G; 3 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 2.3e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 8 CACTGCTGCTCACAGAAGCA 27
||||||| |||| |||||
Db 1 CACTGCTGTCCACAAAAGCA 20

RESULT 290
ADH67543/c
ID ADH67543 standard; DNA; 20 BP.
XX
AC ADH67543;
XX
DT 25-MAR-2004 (first entry)
XX
DE Human glucocorticoid receptor-specific antisense oligonucleotide #4377.
XX
KW antisense oligonucleotide; glucocorticoid receptor; infection;
KW inflammation; tumour formation; diabetes; obesity;
KW cardiovascular disorder; hyperlipidaemia; Cushing's syndrome; human; ss;
KW phosphorothioate backbone; 2'-methoxyethyl; 2'-MOE.
XX
OS Homo sapiens.
XX
PN WO2003099215-A2.
XX
PD 04-DEC-2003.
XX
PF 20-MAY-2003; 2003WO-US016084.
XX
PR 20-MAY-2002; 2002US-0381857P.
XX
PA (PHAA) PHARMACIA CORP.
XX
PI Crosby SD, Nalseth AE;
XX
DR WPI; 2004-035034/03.
XX
PT New antisense compound targeted to a nucleic acid molecule encoding
PT mammalian glucocorticoid receptor, useful for treating diabetes, obesity,
PT cardiovascular disorder, hyperlipidemia or Cushing's syndrome.
XX
PS Claim 4; SEQ ID NO 4377; 985pp; English.
XX
CC The invention comprises an antisense oligonucleotides that are targeted
CC to nucleic acids encoding a mammalian glucocorticoid receptor. The
CC antisense oligonucleotides of the invention are useful for preventing or
CC delaying infection, inflammation or tumour formation. The antisense
CC oligonucleotides are also useful for treating diabetes, obesity,
CC cardiovascular disorders, hyperlipidaemia or Cushing's syndrome. The
CC present DNA sequence represents an antisense oligonucleotide that targets
CC the human glucocorticoid receptor gene. NOTE: The present sequence
CC contains 2'-methoxyethyl (2'-MOE) wings and a phosphorothioate backbone.
XX
SQ Sequence 20 BP; 13 A; 1 C; 0 G; 6 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 2.3e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 3301 TATATTTTTATTTTTATATA 3320
|||||||||| |||| ||
Db 20 TATATTTTTATATTTAGTTA 1

RESULT 291
ADH67827/c
ID ADH67827 standard; DNA; 20 BP.
XX
AC ADH67827;
XX
DT 25-MAR-2004 (first entry)
XX
DE Human glucocorticoid receptor-specific antisense oligonucleotide #4661.
XX
KW antisense oligonucleotide; glucocorticoid receptor; infection;
KW inflammation; tumour formation; diabetes; obesity;
KW cardiovascular disorder; hyperlipidaemia; Cushing's syndrome; human; ss;
KW phosphorothioate backbone; 2'-methoxyethyl; 2'-MOE.
XX
OS Homo sapiens.
XX
PN WO2003099215-A2.
XX
PD 04-DEC-2003.
XX
PF 20-MAY-2003; 2003WO-US016084.
XX
PR 20-MAY-2002; 2002US-0381857P.
XX
PA (PHAA) PHARMACIA CORP.
XX
PI Crosby SD, Nalseth AE;
XX
DR WPI; 2004-035034/03.
XX
PT New antisense compound targeted to a nucleic acid molecule encoding
PT mammalian glucocorticoid receptor, useful for treating diabetes, obesity,
PT cardiovascular disorder, hyperlipidemia or Cushing's syndrome.
XX
PS Claim 4; SEQ ID NO 4661; 985pp; English.
XX
CC The invention comprises an antisense oligonucleotides that are targeted
CC to nucleic acids encoding a mammalian glucocorticoid receptor. The
CC antisense oligonucleotides of the invention are useful for preventing or
CC delaying infection, inflammation or tumour formation. The antisense
CC oligonucleotides are also useful for treating diabetes, obesity,
CC cardiovascular disorders, hyperlipidaemia or Cushing's syndrome. The
CC present DNA sequence represents an antisense oligonucleotide that targets
CC the human glucocorticoid receptor gene. NOTE: The present sequence
CC contains 2'-methoxyethyl (2'-MOE) wings and a phosphorothioate backbone.
XX
SQ Sequence 20 BP; 13 A; 1 C; 0 G; 6 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 2.3e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 3302 ATATTTTTATTTTTATATAT 3321

```
              |||||||||| ||||  |||
Db         20 ATATTTTTATATTTAGTTAT 1
```

RESULT 292
ADH50655/c
ID ADH50655 standard; DNA; 20 BP.
XX
AC ADH50655;
XX
DT 25-MAR-2004 (first entry)
XX
DE Human IRAK-1 DNA, antisense oligonucleotide #49.
XX
KW Antisense therapy; human; interleukin-1 receptor-associated kinase-1;
KW IL-1 receptor-associated kinase-1; IRAK-1;
KW hyperproliferative disorder e.g.; cancer; autoimmune disorder;
KW altered bone metabolism or inflammation; cytostatic; immunosuppressive;
KW osteopathic; antiinflammatory; phosphorothioate; ss.
XX
OS Homo sapiens.
XX
FH Key   Location/Qualifiers
FT modified_base   1. .20
FT   /*tag= a
FT   /mod_base= OTHER
FT   /note= "This oligonucleotide has a phosphorothioate
FT   backbone and 2'-methyoxyethyl (2'-MOE) wings at the 5'
FT   and 3' ends, which are 5 nucleotides in length at each
FT   end. All cytidine residues are 5-methylcytidines"
XX
PN US2003228690-A1.
XX
PD 11-DEC-2003.
XX
PF 10-JUN-2002; 2002US-00167034.
XX
PR 10-JUN-2002; 2002US-00167034.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Baker BF, Freier SM, Dobie KW;
XX
DR WPI; 2004-052028/05.
XX
PT New compound having a sequence targeted to a nucleic acid encoding IL-1
PT receptor-associated kinase-1, useful for preparing a composition for
PT treating hyperproliferative or autoimmune disorder or inflammation.
XX
PS Example 15; SEQ ID NO 62; 66pp; English.
XX
CC The present invention relates to antisense compounds targeted to a
CC nucleic acid encoding interleukin-1 (IL-1) receptor-associated kinase-1
CC (IRAK-1). The antisense compound comprises an antisense oligonucleotide
CC that specifically hybridises with the nucleic acid and inhibits the
CC expression of IRAK-1. The antisense oligonucleotide is a chimeric
CC oligonucleotide. The antisense oligonucleotide comprises at least one
CC modified internucleoside linkage, preferably a phosphorothioate linkage.
CC It also comprises at least one modified sugar moiety, preferably a 2'-O-
CC methoxyethyl (2'-MOE) sugar moiety. The antisense oligonucleotide further
CC comprises at least one modified nucleobase, preferably a 5-
CC methylcytosine. The antisense oligonucleotides are useful for the
CC treatment of diseases such as hyperproliferative disorders, e.g. cancer,
CC autoimmune disorders, altered bone metabolism, and inflammation. The
CC present sequence represents an antisense oligonucleotide used in the
CC examples of the present invention.
XX
SQ Sequence 20 BP; 4 A; 6 C; 7 G; 3 T; 0 U; 0 Other;

```
  Query Match              0.4%;  Score 15.2;  DB 1;  Length 20;
  Best Local Similarity   85.0%;  Pred. No. 2.3e+02;
  Matches   17;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        460 AGAGCCTAAGCCACCTCTCT 479
              ||||||||  ||   |||||||
Db          1 AGAGCCTAGGCGGCCTCTCT 20
```

```
Qy        460 AGAGCCTAAGCCACCTCTCT 479
              ||||||||  ||   |||||||
Db         20 AGAGCCTAGGCGGCCTCTCT 1
```

RESULT 293
ADH50721
ID ADH50721 standard; DNA; 20 BP.
XX
AC ADH50721;
XX
DT 25-MAR-2004 (first entry)
XX
DE Human IRAK-1 DNA target sequence #43.
XX
KW Antisense therapy; human; interleukin-1 receptor-associated kinase-1;
KW IL-1 receptor-associated kinase-1; IRAK-1;
KW hyperproliferative disorder e.g.; cancer; autoimmune disorder;
KW altered bone metabolism or inflammation; cytostatic; immunosuppressive;
KW osteopathic; antiinflammatory; ds.
XX
OS Homo sapiens.
XX
PN US2003228690-A1.
XX
PD 11-DEC-2003.
XX
PF 10-JUN-2002; 2002US-00167034.
XX
PR 10-JUN-2002; 2002US-00167034.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Baker BF, Freier SM, Dobie KW;
XX
DR WPI; 2004-052028/05.
XX
PT New compound having a sequence targeted to a nucleic acid encoding IL-1
PT receptor-associated kinase-1, useful for preparing a composition for
PT treating hyperproliferative or autoimmune disorder or inflammation.
XX
PS Example 15; SEQ ID NO 128; 66pp; English.
XX
CC The present invention relates to antisense compounds targeted to a
CC nucleic acid encoding interleukin-1 (IL-1) receptor-associated kinase-1
CC (IRAK-1). The antisense compound comprises an antisense oligonucleotide
CC that specifically hybridises with the nucleic acid and inhibits the
CC expression of IRAK-1. The antisense oligonucleotide is a chimeric
CC oligonucleotide. The antisense oligonucleotide comprises at least one
CC modified internucleoside linkage, preferably a phosphorothioate linkage.
CC It also comprises at least one modified sugar moiety, preferably a 2'-O-
CC methoxyethyl (2'-MOE) sugar moiety. The antisense oligonucleotide further
CC comprises at least one modified nucleobase, preferably a 5-
CC methylcytosine. The antisense oligonucleotides are useful for the
CC treatment of diseases such as hyperproliferative disorders, e.g. cancer,
CC autoimmune disorders, altered bone metabolism, and inflammation. The
CC present sequence represents a human IRAK-1 DNA target sequence for an
CC antisense oligonucleotide.
XX
SQ Sequence 20 BP; 3 A; 7 C; 6 G; 4 T; 0 U; 0 Other;

```
  Query Match              0.4%;  Score 15.2;  DB 1;  Length 20;
  Best Local Similarity   85.0%;  Pred. No. 2.3e+02;
  Matches   17;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        460 AGAGCCTAAGCCACCTCTCT 479
              ||||||||  ||   |||||||
Db          1 AGAGCCTAGGCGGCCTCTCT 20
```

RESULT 294
ADI27028/c
ID ADI27028 standard; DNA; 20 BP.

```
XX
AC   ADI27028;
XX
DT   22-APR-2004  (first entry)
XX
DE   Cyclin dependent kinase 4 antisense oligonucleotide #194.
XX
KW   cytostatic; antidiabetic; antiinfertility; gene therapy;
KW   cyclin-dependent kinase 4; diabetes; infertility;
KW   hyperproliferative disorder; cancer; antisense technology; human; ss.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag=  b
FT                   /mod_base= OTHER
FT                   /note= "OTHER= Phosphorothioate backbone. All cytidines
FT                   are 5-methylcytidines"
FT   modified_base   1. .5
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
FT   modified_base   15. .20
FT                   /*tag=  c
FT                   /mod_base= OTHER
FT                   /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
XX
PN   US2004005567-A1.
XX
PD   08-JAN-2004.
XX
PF   02-JUL-2002; 2002US-00188779.
XX
PR   02-JUL-2002; 2002US-00188779.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Dean NM,  Freier SM,  Dobie KW;
XX
DR   WPI; 2004-081710/08.
XX
PT   New antisense oligonucleotide, having a sequence targeted to a nucleic
PT   acid encoding cyclin-dependent kinase 4, useful for preparing a
PT   composition for treating diabetes, infertility or hyperproliferative
PT   disorder, e.g., cancer.
XX
PS   Example 15; SEQ ID NO 213; 90pp; English.
XX
CC   The invention describes a new antisense oligonucleotide, having a
CC   sequence comprising 8-80 bp targeted to a nucleic acid encoding cyclin-
CC   dependent kinase 4, specifically hybridises with the nucleic acid
CC   encoding cyclin-dependent kinase 4 and inhibits expression of cyclin-
CC   dependent kinase 4. The antisense oligonucleotide is useful for preparing
CC   a composition for treating diabetes, infertility or hyperproliferative
CC   disorder, e.g., cancer. This sequence represents a human cyclin dependent
CC   kinase 4 antisense oligonucleotide.
XX
SQ   Sequence 20 BP; 4 A; 6 C; 2 G; 8 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 15.2;  DB 1;  Length 20;
  Best Local Similarity   85.0%;  Pred. No. 2.3e+02;
  Matches   17;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       3592 GCTATAGGCATGAAGGAAGT 3611
              || || |||||||||||| |
Db         20 GCAATTGGCATGAAGGAAAT 1


RESULT 295
ADI26888
ID   ADI26888 standard; DNA; 20 BP.
XX
AC   ADI26888;
XX
DT   22-APR-2004  (first entry)
XX
DE   Cyclin dependent kinase 4 antisense oligonucleotide #54.
XX
KW   cytostatic; antidiabetic; antiinfertility; gene therapy;
KW   cyclin-dependent kinase 4; diabetes; infertility;
KW   hyperproliferative disorder; cancer; antisense technology; human; ss.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag=  b
FT                   /mod_base= OTHER
FT                   /note= "OTHER= Phosphorothioate backbone. All cytidines
FT                   are 5-methylcytidines"
FT   modified_base   1. .5
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
FT   modified_base   15. .20
FT                   /*tag=  c
FT                   /mod_base= OTHER
FT                   /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
XX
PN   US2004005567-A1.
XX
PD   08-JAN-2004.
XX
PF   02-JUL-2002; 2002US-00188779.
XX
PR   02-JUL-2002; 2002US-00188779.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Dean NM,  Freier SM,  Dobie KW;
XX
DR   WPI; 2004-081710/08.
XX
PT   New antisense oligonucleotide, having a sequence targeted to a nucleic
PT   acid encoding cyclin-dependent kinase 4, useful for preparing a
PT   composition for treating diabetes, infertility or hyperproliferative
PT   disorder, e.g., cancer.
XX
PS   Example 15; SEQ ID NO 73; 90pp; English.
XX
CC   The invention describes a new antisense oligonucleotide, having a
CC   sequence comprising 8-80 bp targeted to a nucleic acid encoding cyclin-
CC   dependent kinase 4, specifically hybridises with the nucleic acid
CC   encoding cyclin-dependent kinase 4 and inhibits expression of cyclin-
CC   dependent kinase 4. The antisense oligonucleotide is useful for preparing
CC   a composition for treating diabetes, infertility or hyperproliferative
CC   disorder, e.g., cancer. This sequence represents a human cyclin dependent
CC   kinase 4 antisense oligonucleotide.
XX
SQ   Sequence 20 BP; 8 A; 2 C; 6 G; 4 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 15.2;  DB 1;  Length 20;
  Best Local Similarity   85.0%;  Pred. No. 2.3e+02;
  Matches   17;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       3592 GCTATAGGCATGAAGGAAGT 3611
              || || |||||||||||| |
Db          1 GCAATTGGCATGAAGGAAAT 20


RESULT 296
ADJ34054/c
ID   ADJ34054 standard; DNA; 20 BP.
XX
AC   ADJ34054;
```

```
XX
DT   22-APR-2004  (first entry)
XX
DE   Human polo-like kinase target oligonucleotide SEQ ID NO:114.
XX
KW   polo-like kinase; polo-like kinase inhibitor; antisense oligonucleotide;
KW   cytostatic; antiinflammatory; antimicrobial; antisense gene therapy;
KW   kinase inhibitor; hyperproliferative disorder; cancer;
KW   non-small cell lung cancer; oesophageal cancer; infection; inflammation;
KW   tumour; human; target; ss.
XX
OS   Homo sapiens.
XX
PN   WO2004011610-A2.
XX
PD   05-FEB-2004.
XX
PF   25-JUL-2003; 2003WO-US023413.
XX
PR   30-JUL-2002; 2002US-00209405.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Wyatt JR,  Freier SM;
XX
DR   WPI; 2004-143840/14.
XX
PT   New antisense compounds targeted to nucleic acid molecules encoding polo-
PT   like kinase, useful for treating diseases associated with aberrant
PT   expression of polo-like kinase, e.g. non-small cell lung cancer or
PT   esophageal cancer.
XX
PS   Example 15; SEQ ID NO 114; 138pp; English.
XX
CC   The present invention describes a compound (I) of 8-80 nucleobases in
CC   length targeted to a nucleic acid molecule encoding polo-like kinase,
CC   where (I) specifically hybridises with nucleic acid molecule encoding
CC   polo-like kinase and inhibits the expression of polo-like kinase, or
CC   specifically hybridises with at least an 8-nucleobase portion of a
CC   preferred target region on a nucleic acid molecule encoding polo-like
CC   kinase. Also described: (1) a composition comprising (I) and a
CC   pharmaceutical carrier or diluent; (2) inhibiting the expression of polo-
CC   like kinase in cells or tissues comprising contacting the cells or
CC   tissues with (I); (3) treating an animal having a disease or condition
CC   associated with polo-like kinase comprising administering to the animal a
CC   therapeutic or prophylactic amount of (I) so that expression of polo-like
CC   kinase is inhibited; and (4) screening for an antisense compound
CC   comprising contacting a preferred target region of a nucleic acid
CC   molecule encoding polo-like kinase with one or more candidate antisense
CC   compounds comprising at least an 8-nucleobase portion which is
CC   complementary to the preferred target region, and selecting for one or
CC   more candidate antisense compounds which inhibits the expression of a
CC   nucleic acid molecule encoding polo-like kinase. (I) has cytostatic,
CC   antiinflammatory and antimicrobial activities, and can be used in
CC   antisense gene therapy, and as a kinase inhibitor. The antisense
CC   oligonucleotides or compounds (I) can be used for inhibiting the
CC   expression of polo-like kinase, and for treating diseases or conditions
CC   associated with aberrant expression of polo-like kinase, e.g.
CC   hyperproliferative disorder such as cancer, including non-small cell lung
CC   cancer or oesophageal cancer. The antisense compounds are also useful as
CC   research reagents and kits, or in diagnostic, therapeutic and
CC   prophylactic applications, e.g. to prevent or delay infection,
CC   inflammation or tumour formation. The present sequence represents a human
CC   polo-like kinase target oligonucleotide, which is used in an example from
CC   the present invention.
XX
SQ   Sequence 20 BP; 10 A; 5 C; 5 G; 0 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 15.2;  DB 1;  Length 20;
  Best Local Similarity   85.0%;  Pred. No. 2.3e+02;
  Matches   17;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1091 TGTTTCTTCATTTTCCCTGG 1110
                 || |||||| ||||||| ||
Db         20 TGGTTCTTCTTTTTCCCGGG 1


RESULT 297
ADJ33995
ID   ADJ33995 standard; DNA; 20 BP.
XX
AC   ADJ33995;
XX
DT   22-APR-2004  (first entry)
XX
DE   Human polo-like kinase antisense oligonucleotide SEQ ID NO:55.
XX
KW   polo-like kinase; polo-like kinase inhibitor; antisense oligonucleotide;
KW   cytostatic; antiinflammatory; antimicrobial; antisense gene therapy;
KW   kinase inhibitor; hyperproliferative disorder; cancer;
KW   non-small cell lung cancer; oesophageal cancer; infection; inflammation;
KW   tumour; human; phosphorothioate; 2'-O-methoxyethyl; ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base    1. .20
FT                    /*tag=  b
FT                    /mod_base= OTHER
FT                    /note= "phosphorothioate linkages"
FT   modified_base    1. .5
FT                    /*tag=  a
FT                    /mod_base= OTHER
FT                    /note= "2'-O-methoxyethyls"
FT   modified_base    16. .20
FT                    /*tag=  c
FT                    /mod_base= OTHER
FT                    /note= "2'-O-methoxyethyls"
XX
PN   WO2004011610-A2.
XX
PD   05-FEB-2004.
XX
PF   25-JUL-2003; 2003WO-US023413.
XX
PR   30-JUL-2002; 2002US-00209405.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Wyatt JR,  Freier SM;
XX
DR   WPI; 2004-143840/14.
XX
PT   New antisense compounds targeted to nucleic acid molecules encoding polo-
PT   like kinase, useful for treating diseases associated with aberrant
PT   expression of polo-like kinase, e.g. non-small cell lung cancer or
PT   esophageal cancer.
XX
PS   Claim 1; SEQ ID NO 55; 138pp; English.
XX
CC   The present invention describes a compound (I) of 8-80 nucleobases in
CC   length targeted to a nucleic acid molecule encoding polo-like kinase,
CC   where (I) specifically hybridises with nucleic acid molecule encoding
CC   polo-like kinase and inhibits the expression of polo-like kinase, or
CC   specifically hybridises with at least an 8-nucleobase portion of a
CC   preferred target region on a nucleic acid molecule encoding polo-like
CC   kinase. Also described: (1) a composition comprising (I) and a
CC   pharmaceutical carrier or diluent; (2) inhibiting the expression of polo-
CC   like kinase in cells or tissues comprising contacting the cells or
CC   tissues with (I); (3) treating an animal having a disease or condition
CC   associated with polo-like kinase comprising administering to the animal a
CC   therapeutic or prophylactic amount of (I) so that expression of polo-like
CC   kinase is inhibited; and (4) screening for an antisense compound
CC   comprising contacting a preferred target region of a nucleic acid
CC   molecule encoding polo-like kinase with one or more candidate antisense
```

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CC   compounds comprising at least an 8-nucleobase portion which is
CC   complementary to the preferred target region, and selecting for one or
CC   more candidate antisense compounds which inhibits the expression of a
CC   nucleic acid molecule encoding polo-like kinase. (I) has cytostatic,
CC   antiinflammatory and antimicrobial activities, and can be used in
CC   antisense gene therapy, and as a kinase inhibitor. The antisense
CC   oligonucleotides or compounds (I) can be used for inhibiting the
CC   expression of polo-like kinase, and for treating diseases or conditions
CC   associated with aberrant expression of polo-like kinase, e.g.
CC   hyperproliferative disorder such as cancer, including non-small cell lung
CC   cancer or oesophageal cancer. The antisense compounds are also useful as
CC   research reagents and kits, or in diagnostic, therapeutic and
CC   prophylactic applications, e.g. to prevent or delay infection,
CC   inflammation or tumour formation. The present sequence represents a human
CC   polo-like kinase chimeric phosphorothioate antisense oligonucleotide,
CC   which is used in an example from the present invention.
XX
SQ   Sequence 20 BP; 0 A; 5 C; 5 G; 10 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 15.2;  DB 1;  Length 20;
  Best Local Similarity   85.0%;  Pred. No. 2.3e+02;
  Matches   17;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1091 TGTTTCTTCATTTTCCCTGG 1110
              || |||||| ||||||| ||
Db          1 TGGTTCTTCTTTTTCCCGGG 20


RESULT 298
ADJ46575/c
ID   ADJ46575 standard; DNA; 20 BP.
XX
AC   ADJ46575;
XX
DT   06-MAY-2004  (first entry)
XX
DE   Human requiem antisense oligonucleotide ISIS #204782.
XX
KW   human; requiem; hyperproliferative disorder; cancer;
KW   developmental disorder; infection; inflammation; tumour formation; ss;
KW   antisense.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
PN   US2004023385-A1.
XX
PD   05-FEB-2004.
XX
PF   05-AUG-2002; 2002US-00212993.
XX
PR   05-AUG-2002; 2002US-00212993.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Bennett CF,  Freier SM,  Dobie KW;
XX
DR   WPI; 2004-142666/14.
XX
PT   New antisense compound targeted to a nucleic acid molecule encoding
PT   requiem, useful for modulating expression of requiem or for treating
PT   cancer or developmental disorders.
XX
PS   Example 15; SEQ ID NO 50; 66pp; English.
XX
CC   The invention relates to a compound targeted to a nucleic acid molecule
CC   encoding requiem which specifically hybridises with the nucleic acid
CC   molecule encoding requiem and inhibits the expression of requiem. The
CC   compound, particularly the antisense oligonucleotide is useful in
CC   modulating the function of nucleic acid molecules encoding requiem. The
CC   antisense compound can also be used as research tools and diagnostics. It
CC   can also be used as tools in differential and/or combinatorial analyses
CC   to elucidate expression patterns of a portion or the entire complement of
CC   genes expressed within cells and tissues. The compound can also be used
CC   for treating diseases or conditions associated with requiem, preferably
CC   hyperproliferative disorder, e.g. cancer or a developmental disorder. The
CC   compound can also be used as prophylaxis, e.g. to prevent or delay
CC   infection, inflammation or tumour formation. The present sequence
CC   represents the human requiem antisense oligonucleotide.
XX
SQ   Sequence 20 BP; 4 A; 8 C; 4 G; 4 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 15.2;  DB 1;  Length 20;
  Best Local Similarity   85.0%;  Pred. No. 2.3e+02;
  Matches   17;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        547 TACAGAAGCTGGTGGCTGTG 566
              ||| |||| ||| |||||||
Db         20 TACCGAAGATGGCGGCTGTG 1


RESULT 299
ADJ61423
ID   ADJ61423 standard; DNA; 20 BP.
XX
AC   ADJ61423;
XX
DT   06-MAY-2004  (first entry)
XX
DE   Oligonucleotide associated to IL5R-X61176 #115.
XX
KW   interleukin; IL-4 receptor; IL-5 receptor; lung disease;
KW   airway inflammation; allergy; asthma; impeded respiration;
KW   cystic fibrosis; acute respiratory distress syndrome;
KW   pulmonary hypertension; lung inflammation; bronchitis; oligonucleotide;
KW   ss.
XX
OS   Homo sapiens.
XX
PN   WO2004011613-A2.
XX
PD   05-FEB-2004.
XX
PF   25-JUL-2003; 2003WO-US023509.
XX
PR   29-JUL-2002; 2002US-0399076P.
XX
PA   (EPIG-) EPIGENESIS PHARM INC.
XX
PI   Nyce JW,  Tang L,  Sandrasagra A,  Aguilar D,  Miller S;
PI   Shahabuddin S,  Lu H,  Cong H;
XX
DR   WPI; 2004-203534/19.
XX
PT   Novel single or multiple target oligonucleotide anti-sense to e.g.
PT   initiation codons and introns of respiratory disease-relevant genes e.g.,
PT   CCR1, RANTES, MCP4, useful for prophylaxis or treating respiratory
PT   disease e.g., asthma.
XX
PS   Claim 2; SEQ ID NO 2279; 85pp; English.
XX
CC   The present invention relates to an oligonucleotide anti-sense to e.g.,
CC   initiation codon, coding region with 2-10 nucleotides of 5'-end and 3'-
CC   end of nucleic acid target comprising gene(s) chosen from e.g.
CC   interleukin (IL)-4 receptor, IL-5 receptor or salts of the
CC   oligonucleotide and optionally surfactant operatively linked to the
CC   oligonucleotide. The method is useful for preventing or treating a
CC   respiratory or lung disease, which involves administering to the airways
CC   of a subject an effective amount of an inhibitor. The oligonucleotide is
CC   useful for production of a medicament for the prevention and/or treatment
CC   of a respiratory or lung disease. The respiratory or lung disease is
CC   chosen from airway inflammation, allergy(ies), asthma, impeded
CC   respiration, cystic fibrosis (CF), chronic obstructive pulmonary diseases
CC   (COPD), allergic rhinitis (AR), acute respiratory distress syndrome
CC   (ARDS), pulmonary hypertension, lung inflammation, bronchitis, airway
CC   obstruction. The present sequence represents an oligonucleotide of the
```

```
CC   invention.
XX
SQ   Sequence 20 BP; 9 A; 6 C; 3 G; 2 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 15.2;  DB 1;  Length 20;
  Best Local Similarity   85.0%;  Pred. No. 2.3e+02;
  Matches   17;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       2873 AAAATACAGAGTCTTCCAGG 2892
              |||| ||||| || ||||||
Db          1 AAAACACAGAATCCTCCAGG 20


RESULT 300
ADJ59907/c
ID   ADJ59907 standard; DNA; 20 BP.
XX
AC   ADJ59907;
XX
DT   06-MAY-2004  (first entry)
XX
DE   Oligonucleotide associated to MCP4 #25.
XX
KW   interleukin; IL-4 receptor; IL-5 receptor; lung disease;
KW   airway inflammation; allergy; asthma; impeded respiration;
KW   cystic fibrosis; acute respiratory distress syndrome;
KW   pulmonary hypertension; lung inflammation; bronchitis; oligonucleotide;
KW   ss.
XX
OS   Homo sapiens.
XX
PN   WO2004011613-A2.
XX
PD   05-FEB-2004.
XX
PF   25-JUL-2003; 2003WO-US023509.
XX
PR   29-JUL-2002; 2002US-0399076P.
XX
PA   (EPIG-) EPIGENESIS PHARM INC.
XX
PI   Nyce JW,  Tang L,  Sandrasagra A,  Aguilar D,  Miller S;
PI   Shahabuddin S,  Lu H,  Cong H;
XX
DR   WPI; 2004-203534/19.
XX
PT   Novel single or multiple target oligonucleotide anti-sense to e.g.
PT   initiation codons and introns of respiratory disease-relevant genes e.g.,
PT   CCR1, RANTES, MCP4, useful for prophylaxis or treating respiratory
PT   disease e.g., asthma.
XX
PS   Claim 2; SEQ ID NO 763; 85pp; English.
XX
CC   The present invention relates to an oligonucleotide anti-sense to e.g.,
CC   initiation codon, coding region with 2-10 nucleotides of 5'-end and 3'-
CC   end of nucleic acid target comprising gene(s) chosen from e.g.
CC   interleukin (IL)-4 receptor, IL-5 receptor or salts of the
CC   oligonucleotide and optionally surfactant operatively linked to the
CC   oligonucleotide. The method is useful for preventing or treating a
CC   respiratory or lung disease, which involves administering to the airways
CC   of a subject an effective amount of an inhibitor. The oligonucleotide is
CC   useful for production of a medicament for the prevention and/or treatment
CC   of a respiratory or lung disease. The respiratory or lung disease is
CC   chosen from airway inflammation, allergy(ies), asthma, impeded
CC   respiration, cystic fibrosis (CF), chronic obstructive pulmonary diseases
CC   (COPD), allergic rhinitis (AR), acute respiratory distress syndrome
CC   (ARDS), pulmonary hypertension, lung inflammation, bronchitis, airway
CC   obstruction. The present sequence represents an oligonucleotide of the
CC   invention.
XX
SQ   Sequence 20 BP; 5 A; 6 C; 5 G; 4 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 15.2;  DB 1;  Length 20;
  Best Local Similarity   85.0%;  Pred. No. 2.3e+02;
  Matches   17;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       3184 TCTCCTTACAGAGGTTAAAG 3203
              ||||||| |||||| | |||
Db         20 TCTCCTTGCAGAGGCTGAAG 1


RESULT 301
ADJ60421
ID   ADJ60421 standard; DNA; 20 BP.
XX
AC   ADJ60421;
XX
DT   06-MAY-2004  (first entry)
XX
DE   Oligonucleotide associated to ICAM #195.
XX
KW   interleukin; IL-4 receptor; IL-5 receptor; lung disease;
KW   airway inflammation; allergy; asthma; impeded respiration;
KW   cystic fibrosis; acute respiratory distress syndrome;
KW   pulmonary hypertension; lung inflammation; bronchitis; oligonucleotide;
KW   ss.
XX
OS   Homo sapiens.
XX
PN   WO2004011613-A2.
XX
PD   05-FEB-2004.
XX
PF   25-JUL-2003; 2003WO-US023509.
XX
PR   29-JUL-2002; 2002US-0399076P.
XX
PA   (EPIG-) EPIGENESIS PHARM INC.
XX
PI   Nyce JW,  Tang L,  Sandrasagra A,  Aguilar D,  Miller S;
PI   Shahabuddin S,  Lu H,  Cong H;
XX
DR   WPI; 2004-203534/19.
XX
PT   Novel single or multiple target oligonucleotide anti-sense to e.g.
PT   initiation codons and introns of respiratory disease-relevant genes e.g.,
PT   CCR1, RANTES, MCP4, useful for prophylaxis or treating respiratory
PT   disease e.g., asthma.
XX
PS   Claim 2; SEQ ID NO 1277; 85pp; English.
XX
CC   The present invention relates to an oligonucleotide anti-sense to e.g.,
CC   initiation codon, coding region with 2-10 nucleotides of 5'-end and 3'-
CC   end of nucleic acid target comprising gene(s) chosen from e.g.
CC   interleukin (IL)-4 receptor, IL-5 receptor or salts of the
CC   oligonucleotide and optionally surfactant operatively linked to the
CC   oligonucleotide. The method is useful for preventing or treating a
CC   respiratory or lung disease, which involves administering to the airways
CC   of a subject an effective amount of an inhibitor. The oligonucleotide is
CC   useful for production of a medicament for the prevention and/or treatment
CC   of a respiratory or lung disease. The respiratory or lung disease is
CC   chosen from airway inflammation, allergy(ies), asthma, impeded
CC   respiration, cystic fibrosis (CF), chronic obstructive pulmonary diseases
CC   (COPD), allergic rhinitis (AR), acute respiratory distress syndrome
CC   (ARDS), pulmonary hypertension, lung inflammation, bronchitis, airway
CC   obstruction. The present sequence represents an oligonucleotide of the
CC   invention.
XX
SQ   Sequence 20 BP; 5 A; 3 C; 8 G; 4 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 15.2;  DB 1;  Length 20;
  Best Local Similarity   85.0%;  Pred. No. 2.3e+02;
  Matches   17;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       3750 TTTAGGGAGACACAGATGGC 3769
              || |||| |||||||||| |
```

```
Db          1 TTGAGGGGGACACAGATGTC 20
```

```
RESULT 302
ADJ38722
ID   ADJ38722 standard; DNA; 20 BP.
XX
AC   ADJ38722;
XX
DT   06-MAY-2004  (first entry)
XX
DE   Human resistin antisense oligonucleotide seq id 111.
XX
KW   antidiabetic; anorectic; cardiant; antiarteriosclerotic;
KW   resistin inhibitor; resistin; metabolic disease; diabetes; obesity;
KW   atherosclerosis; antisense technology; human; antisense oligonucleotide;
KW   ss.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag=  b
FT                   /mod_base= OTHER
FT                   /note= "OTHER= Phosphorothioate backbone. All cytidines
FT                   are 5-methylcytidines"
FT   modified_base   1. .5
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
FT   modified_base   15. .20
FT                   /*tag=  c
FT                   /mod_base= OTHER
FT                   /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
XX
PN   US2004023383-A1.
XX
PD   05-FEB-2004.
XX
PF   31-JUL-2002; 2002US-00210833.
XX
PR   31-JUL-2002; 2002US-00210833.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Bhanot S,  Freier SM;
XX
DR   WPI; 2004-142664/14.
XX
PT   New compounds, particularly antisense oligonucleotides targeted to a
PT   nucleic acid encoding resistin, useful for treating a metabolic disorder,
PT   e.g. diabetes or obesity, or atherosclerosis.
XX
PS   Example 15; SEQ ID NO 111; 75pp; English.
XX
CC   The invention describes a compound 8-80 nucleobases in length targeted
CC   to, and which specifically hybridises with a nucleic acid molecule
CC   encoding resistin, and inhibits the expression of resistin. The compound,
CC   composition and methods are useful for treating a disease or condition
CC   associated with resistin, such as a metabolic disease, e.g. diabetes or
CC   obesity, or atherosclerosis. They are also useful in research and
CC   diagnostics for modulating the expression of resistin. This sequence
CC   represents a human resistin antisense oligonucleotide.
XX
SQ   Sequence 20 BP; 4 A; 3 C; 9 G; 4 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 15.2;  DB 1;  Length 20;
  Best Local Similarity   85.0%;  Pred. No. 2.3e+02;
  Matches   17;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        547 TACAGAAGCTGGTGGCTGTG 566
              ||||| | | ||||||||||
Db          1 TACAGGAACGGGTGGCTGTG 20
```

```
RESULT 303
ADJ54308
ID   ADJ54308 standard; DNA; 20 BP.
XX
AC   ADJ54308;
XX
DT   06-MAY-2004  (first entry)
XX
DE   Human B7-1 DNA antisense oligonucleotide #33.
XX
KW   Airway hyperresponsiveness; pulmonary inflammation;
KW   antisense oligonucleotide; human; B7 protein; B7-1; asthma;
KW   antiasthmatic; antiinflammatory; ss.
XX
OS   Homo sapiens.
XX
PN   US2004023917-A1.
XX
PD   05-FEB-2004.
XX
PF   23-MAY-2003; 2003US-00444206.
XX
PR   31-DEC-1996;   96US-00777266.
PR   04-JUN-1999;   99US-00326186.
PR   25-MAY-2000; 2000WO-US014471.
PR   09-MAY-2001; 2001US-00851871.
XX
PA   (BENN/) BENNETT C F.
PA   (VICK/) VICKERS T A.
PA   (KARR/) KARRAS J G.
XX
PI   Bennett CF,  Vickers TA,  Karras JG;
XX
DR   WPI; 2004-132608/13.
XX
PT   Treating airway hyperresponsiveness or pulmonary inflammation comprises
PT   administering an antisense compound targeted to a nucleic acid molecule
PT   encoding a human B7 protein to the individual.
XX
PS   Example 12; SEQ ID NO 128; 182pp; English.
XX
CC   The invention relates to a method for treating airway hyperresponsiveness
CC   or pulmonary inflammation in an individual comprising administering an
CC   antisense compound targeted to a nucleic acid molecule encoding a human
CC   B7 protein. The invention also relates to a method of inhibiting
CC   expression of a nucleic acid molecule encoding B7-1 or B7-2. The
CC   antisense compound is an antisense oligonucleotide which has a modified
CC   sugar moiety and nucleobase. The human B7 protein is human B7-1 or B7-2
CC   protein or both. The compound is useful for treating airway
CC   hyperresponsiveness or pulmonary inflammation, which is associated with
CC   asthma, by inhibiting expression of human B7 protein. This sequence
CC   represents an antisense oligonucleotide of the invention.
XX
SQ   Sequence 20 BP; 3 A; 4 C; 4 G; 9 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 15.2;  DB 1;  Length 20;
  Best Local Similarity   85.0%;  Pred. No. 2.3e+02;
  Matches   17;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1317 TTGAGTTTCAAAGGTTGCTG 1336
              || ||||||| || ||||||
Db          1 TTTAGTTTCACAGCTTGCTG 20
```

```
RESULT 304
ADJ54433/c
ID   ADJ54433 standard; DNA; 20 BP.
XX
AC   ADJ54433;
XX
DT   06-MAY-2004  (first entry)
```

XX
DE Human B7-1 DNA antisense oligonucleotide #88.
XX
KW Airway hyperresponsiveness; pulmonary inflammation;
KW antisense oligonucleotide; human; B7 protein; B7-1; asthma;
KW antiasthmatic; antiinflammatory; ss.
XX
OS Homo sapiens.
XX
PN US2004023917-A1.
XX
PD 05-FEB-2004.
XX
PF 23-MAY-2003; 2003US-00444206.
XX
PR 31-DEC-1996; 96US-00777266.
PR 04-JUN-1999; 99US-00326186.
PR 25-MAY-2000; 2000WO-US014471.
PR 09-MAY-2001; 2001US-00851871.
XX
PA (BENN/) BENNETT C F.
PA (VICK/) VICKERS T A.
PA (KARR/) KARRAS J G.
XX
PI Bennett CF, Vickers TA, Karras JG;
XX
DR WPI; 2004-132608/13.
XX
PT Treating airway hyperresponsiveness or pulmonary inflammation comprises
PT administering an antisense compound targeted to a nucleic acid molecule
PT encoding a human B7 protein to the individual.
XX
PS Example 19; SEQ ID NO 253; 182pp; English.
XX
CC The invention relates to a method for treating airway hyperresponsiveness
CC or pulmonary inflammation in an individual comprising administering an
CC antisense compound targeted to a nucleic acid molecule encoding a human
CC B7 protein. The invention also relates to a method of inhibiting
CC expression of a nucleic acid molecule encoding B7-1 or B7-2. The
CC antisense compound is an antisense oligonucleotide which has a modified
CC sugar moiety and nucleobase. The human B7 protein is human B7-1 or B7-2
CC protein or both. The compound is useful for treating airway
CC hyperresponsiveness or pulmonary inflammation, which is associated with
CC asthma, by inhibiting expression of human B7 protein. This sequence
CC represents an antisense oligonucleotide of the invention.
XX
SQ Sequence 20 BP; 7 A; 4 C; 8 G; 1 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 2.3e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

```
Qy       3767 GGCTGGGATCCCTCCCCTGT 3786
              |||||| ||||||| ||| |
Db         20 GGCTGGCATCCCTCTCCTTT 1
```

RESULT 305
ADK12305
ID ADK12305 standard; DNA; 20 BP.
XX
AC ADK12305;
XX
DT 20-MAY-2004 (first entry)
XX
DE Mouse complement component C3 DNA, antisense oligonucleotide #51.
XX
KW Antisense therapy; mouse; complement component C3; autoimmune disorder;
KW multiple sclerosis; infection; atherosclerosis; neuroprotective;
KW antiarteriosclerotic; antimicrobial; antiinflammatory; cytostatic;
KW phosphorothioate; ss.
XX
OS Mus musculus.
XX
FH Key Location/Qualifiers
FT modified_base 1. .20
FT /*tag= a
FT /mod_base= OTHER
FT /note= "This oligonucleotide has a phosphorothioate
FT backbone and 2'-methyoxyethyl (2'-MOE) wings at the 5'
FT and 3' ends, which are 5 nucleotides in length at each
FT end. All cytidine residues are 5-methylcytidines"
XX
PN US2004043956-A1.
XX
PD 04-MAR-2004.
XX
PF 18-AUG-2003; 2003US-00642802.
XX
PR 23-OCT-2001; 2001US-00001076.
XX
PA (GRAH/) GRAHAM M J.
PA (WATT/) WATT A T.
XX
PI Graham MJ, Watt AT;
XX
DR WPI; 2004-225730/21.
XX
PT New antisense compound targeted to a nucleic acid molecule encoding
PT complement component C3, useful for treating multiple sclerosis, an
PT infection or atherosclerosis.
XX
PS Claim 3; SEQ ID NO 163; 74pp; English.
XX
CC The present invention relates to antisense compounds targeted to a
CC nucleic acids encoding human and mouse complement component C3. The
CC antisense compound comprises an antisense oligonucleotide that
CC specifically hybridises with the nucleic acid and inhibits the expression
CC of complement component C3 in cells. The antisense oligonucleotide is a
CC chimeric oligonucleotide. The antisense oligonucleotide comprises at
CC least one modified internucleoside linkage, preferably a phosphorothioate
CC linkage. It also comprises at least one modified sugar moiety, preferably
CC a 2'-O-methoxyethyl (2'-MOE) sugar moiety. The antisense oligonucleotide
CC further comprises at least one modified nucleobase, preferably a 5-
CC methylcytosine. The antisense oligonucleotides are useful for the
CC treatment of diseases such as autoimmune disorders e.g. multiple
CC sclerosis, infections, and atherosclerosis. The present sequence
CC represents an antisense oligonucleotide used in the examples of the
CC present invention.
XX
SQ Sequence 20 BP; 5 A; 6 C; 4 G; 5 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 2.3e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

```
Qy       1399 TTACCATGAGTTCAAACTTC 1418
              | ||| |||| |||||||||
Db          1 TGACCCTGAGGTCAAACTTC 20
```

RESULT 306
ADJ24260/c
ID ADJ24260 standard; DNA; 20 BP.
XX
AC ADJ24260;
XX
DT 20-MAY-2004 (first entry)
XX
DE Human endothelial lipase antisense oligonucleotide, SEQ ID 2658.
XX
KW Antilipaemic; Cardiovascular; Analgesic; Antianginal; Antisense therapy;
KW Human; Endothelial Lipase; dyslipidaemia; high density lipoprotein; HDL;
KW cardiovascular disorder; metabolic syndrome X; ss.
XX
OS Homo sapiens.

```
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "This oligonucleotide has a phosphorothioate
FT                   backbone and 2-'methyoxyethyl (2'-MOE) wings at the 5'
FT                   and 3' ends, which are 4 nucleotides in length. Also all
FT                   cytidine residues are 5-methylcytidines"
XX
PN   WO2004009541-A2.
XX
PD   29-JAN-2004.
XX
PF   18-JUL-2003; 2003WO-US022410.
XX
PR   19-JUL-2002; 2002US-0397106P.
XX
PA   (PHAA ) PHARMACIA CORP.
XX
PI   Bhat BG;
XX
DR   WPI; 2004-132912/13.
XX
PT   New antisense oligonucleotide for modulating endothelial lipase
PT   expression, for diagnosing, preventing or treating e.g. dyslipidemia, low
PT   high density lipoprotein or cardiovascular disorders.
XX
PS   Claim 3; SEQ ID NO 2658; 1007pp; English.
XX
CC   The present invention relates to antisense oligonucleotides (ADJ21603-
CC   ADJ25510) targeted to human Endothelial Lipase (EL) coding sequence
CC   (ADJ25517), where the antisense oligonucleotide specifically hybridises
CC   with and inhibits the expression of EL. The antisense oligonucleotides
CC   are useful for modulating the expression of endothelial lipase in cells
CC   or tissues to treat diseases associated with EL expression, such as
CC   dyslipidaemia, low high density lipoprotein (HDL), cardiovascular
CC   disorder or metabolic syndrome X. In addition, the oligonucleotides are
CC   used for diagnostics, prophylaxis, or as research reagents or kits.
XX
SQ   Sequence 20 BP; 10 A; 3 C; 2 G; 5 T; 0 U; 0 Other;

  Query Match              0.4%;  Score 15.2;  DB 1;  Length 20;
  Best Local Similarity   85.0%;  Pred. No. 2.3e+02;
  Matches   17;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1897 AGAATGACTTTGCTTGTACT 1916
              ||||||| |||  |||||||
Db         20 AGAATGATTTTCTTTGTACT 1


RESULT 307
ADJ21649
ID   ADJ21649 standard; DNA; 20 BP.
XX
AC   ADJ21649;
XX
DT   20-MAY-2004  (first entry)
XX
DE   Human endothelial lipase antisense oligonucleotide, SEQ ID 47.
XX
KW   Antilipaemic; Cardiovascular; Analgesic; Antianginal; Antisense therapy;
KW   Human; Endothelial Lipase; dyslipidaemia; high density lipoprotein; HDL;
KW   cardiovascular disorder; metabolic syndrome X; ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "This oligonucleotide has a phosphorothioate
FT                   backbone and 2-'methyoxyethyl (2'-MOE) wings at the 5'
FT                   and 3' ends, which are 4 nucleotides in length. Also all
FT                   cytidine residues are 5-methylcytidines"
XX
PN   WO2004009541-A2.
XX
PD   29-JAN-2004.
XX
PF   18-JUL-2003; 2003WO-US022410.
XX
PR   19-JUL-2002; 2002US-0397106P.
XX
PA   (PHAA ) PHARMACIA CORP.
XX
PI   Bhat BG;
XX
DR   WPI; 2004-132912/13.
XX
PT   New antisense oligonucleotide for modulating endothelial lipase
PT   expression, for diagnosing, preventing or treating e.g. dyslipidemia, low
PT   high density lipoprotein or cardiovascular disorders.
XX
PS   Claim 3; SEQ ID NO 47; 1007pp; English.
XX
CC   The present invention relates to antisense oligonucleotides (ADJ21603-
CC   ADJ25510) targeted to human Endothelial Lipase (EL) coding sequence
CC   (ADJ25517), where the antisense oligonucleotide specifically hybridises
CC   with and inhibits the expression of EL. The antisense oligonucleotides
CC   are useful for modulating the expression of endothelial lipase in cells
CC   or tissues to treat diseases associated with EL expression, such as
CC   dyslipidaemia, low high density lipoprotein (HDL), cardiovascular
CC   disorder or metabolic syndrome X. In addition, the oligonucleotides are
CC   used for diagnostics, prophylaxis, or as research reagents or kits.
XX
SQ   Sequence 20 BP; 4 A; 5 C; 5 G; 6 T; 0 U; 0 Other;

  Query Match              0.4%;  Score 15.2;  DB 1;  Length 20;
  Best Local Similarity   85.0%;  Pred. No. 2.3e+02;
  Matches   17;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       3130 ACTGCAGTCGTCAAGGGGCT 3149
              |||||||| || | |||||
Db          1 ACTGCAGTCTTCTAAGGGCT 20


RESULT 308
ADJ24576/c
ID   ADJ24576 standard; DNA; 20 BP.
XX
AC   ADJ24576;
XX
DT   20-MAY-2004  (first entry)
XX
DE   Human endothelial lipase antisense oligonucleotide, SEQ ID 2974.
XX
KW   Antilipaemic; Cardiovascular; Analgesic; Antianginal; Antisense therapy;
KW   Human; Endothelial Lipase; dyslipidaemia; high density lipoprotein; HDL;
KW   cardiovascular disorder; metabolic syndrome X; ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "This oligonucleotide has a phosphorothioate
FT                   backbone and 2-'methyoxyethyl (2'-MOE) wings at the 5'
FT                   and 3' ends, which are 4 nucleotides in length. Also all
FT                   cytidine residues are 5-methylcytidines"
XX
PN   WO2004009541-A2.
```

```
XX
PD   29-JAN-2004.
XX
PF   18-JUL-2003; 2003WO-US022410.
XX
PR   19-JUL-2002; 2002US-0397106P.
XX
PA   (PHAA ) PHARMACIA CORP.
XX
PI   Bhat BG;
XX
DR   WPI; 2004-132912/13.
XX
PT   New antisense oligonucleotide for modulating endothelial lipase
PT   expression, for diagnosing, preventing or treating e.g. dyslipidemia, low
PT   high density lipoprotein or cardiovascular disorders.
XX
PS   Claim 3; SEQ ID NO 2974; 1007pp; English.
XX
CC   The present invention relates to antisense oligonucleotides (ADJ21603-
CC   ADJ25510) targeted to human Endothelial Lipase (EL) coding sequence
CC   (ADJ25517), where the antisense oligonucleotide specifically hybridises
CC   with and inhibits the expression of EL. The antisense oligonucleotides
CC   are useful for modulating the expression of endothelial lipase in cells
CC   or tissues to treat diseases associated with EL expression, such as
CC   dyslipidaemia, low high density lipoprotein (HDL), cardiovascular
CC   disorder or metabolic syndrome X. In addition, the oligonucleotides are
CC   used for diagnostics, prophylaxis, or as research reagents or kits.
XX
SQ   Sequence 20 BP; 11 A; 3 C; 2 G; 4 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 15.2;  DB 1;  Length 20;
  Best Local Similarity   85.0%;  Pred. No. 2.3e+02;
  Matches   17;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1898 GAATGACTTTGCTTGTACTT 1917
              |||||| |||  ||||||||
Db         20 GAATGATTTTCTTTGTACTT 1


RESULT 309
ADK79428/c
ID   ADK79428 standard; DNA; 20 BP.
XX
AC   ADK79428;
XX
DT   20-MAY-2004  (first entry)
XX
DE   Chimeric phosphorothioate oligonucleotide to target Nav1.3 #6762.
XX
KW   Nav1.3; Analgesic; Nootropic; Neuroprotective; post-herpetic neuralgia;
KW   diabetic neuropathy; arthritic pain; migraine headache;
KW   infantile epilepsy; ataxia; ss.
XX
OS   Synthetic.
XX
PN   WO2004016754-A2.
XX
PD   26-FEB-2004.
XX
PF   14-AUG-2003; 2003WO-US025465.
XX
PR   14-AUG-2002; 2002US-0403416P.
XX
PA   (PHAA ) PHARMACIA CORP.
XX
PI   Roberds SL;
XX
DR   WPI; 2004-203785/19.
XX
PT   New antisense compound targeted to a nucleic acid molecule encoding
PT   Nav1.3, useful for useful for treating a disease or condition associated
PT   with Nav1.3, e.g. pain, seizure disorder such as childhood seizure
PT   disorder, or ataxia.
XX
PS   Claim 4; SEQ ID NO 6762; 417pp; English.
XX
CC   The present invention relates to an antisense compound targeted to a
CC   nucleic acid molecule encoding Nav1.3, where the antisense compound
CC   specifically hybridizes with and inhibits the expression of Nav1.3. The
CC   compound and composition are useful for treating a disease or condition
CC   associated with Nav1.3, e.g. pain including but not limited to
CC   neuropathic pain, post-herpetic neuralgia, chronic pain, lower back pain,
CC   diabetic neuropathy, trigeminal neuropathy, arthritic pain, acute pain,
CC   pain from burns, migraine headache, cluster headache, mild-to-moderate
CC   headache; seizure disorder such as childhood seizure disorder, including
CC   but not limited to neonatal or infantile epilepsy; or ataxia. The present
CC   sequence represents a chimeric phosphorothioate oligonucleotide with
CC   2'MOE wings and a deoxy gap. Used during the antisense inhibition of
CC   human Nav1.3 expression, the oligonucleotides are designed to target
CC   different regions of the human Nav1.3 RNA.
XX
SQ   Sequence 20 BP; 3 A; 5 C; 1 G; 11 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 15.2;  DB 1;  Length 20;
  Best Local Similarity   85.0%;  Pred. No. 2.3e+02;
  Matches   17;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        967 ACTTGGAAAAGTTTGACAAA 986
              ||  |||||||||||| |||
Db         20 ACAAGGAAAAGTTTGAGAAA 1


RESULT 310
ADK78831
ID   ADK78831 standard; DNA; 20 BP.
XX
AC   ADK78831;
XX
DT   20-MAY-2004  (first entry)
XX
DE   Chimeric phosphorothioate oligonucleotide to target Nav1.3 #6165.
XX
KW   Nav1.3; Analgesic; Nootropic; Neuroprotective; post-herpetic neuralgia;
KW   diabetic neuropathy; arthritic pain; migraine headache;
KW   infantile epilepsy; ataxia; ss.
XX
OS   Synthetic.
XX
PN   WO2004016754-A2.
XX
PD   26-FEB-2004.
XX
PF   14-AUG-2003; 2003WO-US025465.
XX
PR   14-AUG-2002; 2002US-0403416P.
XX
PA   (PHAA ) PHARMACIA CORP.
XX
PI   Roberds SL;
XX
DR   WPI; 2004-203785/19.
XX
PT   New antisense compound targeted to a nucleic acid molecule encoding
PT   Nav1.3, useful for useful for treating a disease or condition associated
PT   with Nav1.3, e.g. pain, seizure disorder such as childhood seizure
PT   disorder, or ataxia.
XX
PS   Claim 4; SEQ ID NO 6165; 417pp; English.
XX
CC   The present invention relates to an antisense compound targeted to a
CC   nucleic acid molecule encoding Nav1.3, where the antisense compound
CC   specifically hybridizes with and inhibits the expression of Nav1.3. The
CC   compound and composition are useful for treating a disease or condition
CC   associated with Nav1.3, e.g. pain including but not limited to
CC   neuropathic pain, post-herpetic neuralgia, chronic pain, lower back pain,
```

```
CC   diabetic neuropathy, trigeminal neuropathy, arthritic pain, acute pain,
CC   pain from burns, migraine headache, cluster headache, mild-to-moderate
CC   headache; seizure disorder such as childhood seizure disorder, including
CC   but not limited to neonatal or infantile epilepsy; or ataxia. The present
CC   sequence represents a chimeric phosphorothioate oligonucleotide with
CC   2'MOE wings and a deoxy gap. Used during the antisense inhibition of
CC   human Nav1.3 expression, the oligonucleotides are designed to target
CC   different regions of the human Nav1.3 RNA.
XX
SQ   Sequence 20 BP; 4 A; 5 C; 3 G; 8 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 15.2;  DB 1;  Length 20;
  Best Local Similarity   85.0%;  Pred. No. 2.3e+02;
  Matches   17;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1080 TGTTTGACAAATGTTTCTTC 1099
              ||||||||  |||||  |||  |
Db          1 TGTTTGACCAATGTATCTCC 20


RESULT 311
ADK73906
ID   ADK73906 standard; DNA; 20 BP.
XX
AC   ADK73906;
XX
DT   20-MAY-2004  (first entry)
XX
DE   Chimeric phosphorothioate oligonucleotide to target Nav1.3 #1240.
XX
KW   Nav1.3; Analgesic; Nootropic; Neuroprotective; post-herpetic neuralgia;
KW   diabetic neuropathy; arthritic pain; migraine headache;
KW   infantile epilepsy; ataxia; ss.
XX
OS   Synthetic.
XX
PN   WO2004016754-A2.
XX
PD   26-FEB-2004.
XX
PF   14-AUG-2003; 2003WO-US025465.
XX
PR   14-AUG-2002; 2002US-0403416P.
XX
PA   (PHAA ) PHARMACIA CORP.
XX
PI   Roberds SL;
XX
DR   WPI; 2004-203785/19.
XX
PT   New antisense compound targeted to a nucleic acid molecule encoding
PT   Nav1.3, useful for useful for treating a disease or condition associated
PT   with Nav1.3, e.g. pain, seizure disorder such as childhood seizure
PT   disorder, or ataxia.
XX
PS   Claim 4; SEQ ID NO 1240; 417pp; English.
XX
CC   The present invention relates to an antisense compound targeted to a
CC   nucleic acid molecule encoding Nav1.3, where the antisense compound
CC   specifically hybridizes with and inhibits the expression of Nav1.3. The
CC   compound and composition are useful for treating a disease or condition
CC   associated with Nav1.3, e.g. pain including but not limited to
CC   neuropathic pain, post-herpetic neuralgia, chronic pain, lower back pain,
CC   diabetic neuropathy, trigeminal neuropathy, arthritic pain, acute pain,
CC   pain from burns, migraine headache, cluster headache, mild-to-moderate
CC   headache; seizure disorder such as childhood seizure disorder, including
CC   but not limited to neonatal or infantile epilepsy; or ataxia. The present
CC   sequence represents a chimeric phosphorothioate oligonucleotide with
CC   2'MOE wings and a deoxy gap. Used during the antisense inhibition of
CC   human Nav1.3 expression, the oligonucleotides are designed to target
CC   different regions of the human Nav1.3 RNA.
XX
SQ   Sequence 20 BP; 5 A; 2 C; 4 G; 9 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 15.2;  DB 1;  Length 20;
  Best Local Similarity   85.0%;  Pred. No. 2.3e+02;
  Matches   17;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        256 AGGTGGTTCCTAATATTACT 275
              ||||||| ||| ||||| |
Db          1 AGGTGGTTACTACTATTATT 20


RESULT 312
ADK77560
ID   ADK77560 standard; DNA; 20 BP.
XX
AC   ADK77560;
XX
DT   20-MAY-2004  (first entry)
XX
DE   Chimeric phosphorothioate oligonucleotide to target Nav1.3 #4894.
XX
KW   Nav1.3; Analgesic; Nootropic; Neuroprotective; post-herpetic neuralgia;
KW   diabetic neuropathy; arthritic pain; migraine headache;
KW   infantile epilepsy; ataxia; ss.
XX
OS   Synthetic.
XX
PN   WO2004016754-A2.
XX
PD   26-FEB-2004.
XX
PF   14-AUG-2003; 2003WO-US025465.
XX
PR   14-AUG-2002; 2002US-0403416P.
XX
PA   (PHAA ) PHARMACIA CORP.
XX
PI   Roberds SL;
XX
DR   WPI; 2004-203785/19.
XX
PT   New antisense compound targeted to a nucleic acid molecule encoding
PT   Nav1.3, useful for useful for treating a disease or condition associated
PT   with Nav1.3, e.g. pain, seizure disorder such as childhood seizure
PT   disorder, or ataxia.
XX
PS   Claim 4; SEQ ID NO 4894; 417pp; English.
XX
CC   The present invention relates to an antisense compound targeted to a
CC   nucleic acid molecule encoding Nav1.3, where the antisense compound
CC   specifically hybridizes with and inhibits the expression of Nav1.3. The
CC   compound and composition are useful for treating a disease or condition
CC   associated with Nav1.3, e.g. pain including but not limited to
CC   neuropathic pain, post-herpetic neuralgia, chronic pain, lower back pain,
CC   diabetic neuropathy, trigeminal neuropathy, arthritic pain, acute pain,
CC   pain from burns, migraine headache, cluster headache, mild-to-moderate
CC   headache; seizure disorder such as childhood seizure disorder, including
CC   but not limited to neonatal or infantile epilepsy; or ataxia. The present
CC   sequence represents a chimeric phosphorothioate oligonucleotide with
CC   2'MOE wings and a deoxy gap. Used during the antisense inhibition of
CC   human Nav1.3 expression, the oligonucleotides are designed to target
CC   different regions of the human Nav1.3 RNA.
XX
SQ   Sequence 20 BP; 8 A; 0 C; 5 G; 7 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 15.2;  DB 1;  Length 20;
  Best Local Similarity   85.0%;  Pred. No. 2.3e+02;
  Matches   17;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        940 TTCTGGGAGAATTTAGAAAT 959
              ||  ||||||||||  |||||
Db          1 TTATGGGAGAATTATGAAAT 20
```

RESULT 313
ADK81604
ID ADK81604 standard; DNA; 20 BP.
XX
AC ADK81604;
XX
DT 20-MAY-2004 (first entry)
XX
DE Chimeric phosphorothioate oligonucleotide to target Nav1.3 #8938.
XX
KW Nav1.3; Analgesic; Nootropic; Neuroprotective; post-herpetic neuralgia;
KW diabetic neuropathy; arthritic pain; migraine headache;
KW infantile epilepsy; ataxia; ss.
XX
OS Synthetic.
XX
PN WO2004016754-A2.
XX
PD 26-FEB-2004.
XX
PF 14-AUG-2003; 2003WO-US025465.
XX
PR 14-AUG-2002; 2002US-0403416P.
XX
PA (PHAA) PHARMACIA CORP.
XX
PI Roberds SL;
XX
DR WPI; 2004-203785/19.
XX
PT New antisense compound targeted to a nucleic acid molecule encoding
PT Nav1.3, useful for useful for treating a disease or condition associated
PT with Nav1.3, e.g. pain, seizure disorder such as childhood seizure
PT disorder, or ataxia.
XX
PS Claim 4; SEQ ID NO 8938; 417pp; English.
XX
CC The present invention relates to an antisense compound targeted to a
CC nucleic acid molecule encoding Nav1.3, where the antisense compound
CC specifically hybridizes with and inhibits the expression of Nav1.3. The
CC compound and composition are useful for treating a disease or condition
CC associated with Nav1.3, e.g. pain including but not limited to
CC neuropathic pain, post-herpetic neuralgia, chronic pain, lower back pain,
CC diabetic neuropathy, trigeminal neuropathy, arthritic pain, acute pain,
CC pain from burns, migraine headache, cluster headache, mild-to-moderate
CC headache; seizure disorder such as childhood seizure disorder, including
CC but not limited to neonatal or infantile epilepsy; or ataxia. The present
CC sequence represents a chimeric phosphorothioate oligonucleotide with
CC 2'MOE wings and a deoxy gap. Used during the antisense inhibition of
CC human Nav1.3 expression, the oligonucleotides are designed to target
CC different regions of the human Nav1.3 RNA.
XX
SQ Sequence 20 BP; 10 A; 4 C; 5 G; 1 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 2.3e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 485 AATATTGACAGGAAACCCCA 504
|||| |||||||| ||||
Db 1 AATAGAGACAGGAAAGCCCA 20

RESULT 314
ADK76828
ID ADK76828 standard; DNA; 20 BP.
XX
AC ADK76828;
XX
DT 20-MAY-2004 (first entry)
XX
DE Chimeric phosphorothioate oligonucleotide to target Nav1.3 #4162.
XX
KW Nav1.3; Analgesic; Nootropic; Neuroprotective; post-herpetic neuralgia;
KW diabetic neuropathy; arthritic pain; migraine headache;
KW infantile epilepsy; ataxia; ss.
XX
OS Synthetic.
XX
PN WO2004016754-A2.
XX
PD 26-FEB-2004.
XX
PF 14-AUG-2003; 2003WO-US025465.
XX
PR 14-AUG-2002; 2002US-0403416P.
XX
PA (PHAA) PHARMACIA CORP.
XX
PI Roberds SL;
XX
DR WPI; 2004-203785/19.
XX
PT New antisense compound targeted to a nucleic acid molecule encoding
PT Nav1.3, useful for useful for treating a disease or condition associated
PT with Nav1.3, e.g. pain, seizure disorder such as childhood seizure
PT disorder, or ataxia.
XX
PS Claim 4; SEQ ID NO 4162; 417pp; English.
XX
CC The present invention relates to an antisense compound targeted to a
CC nucleic acid molecule encoding Nav1.3, where the antisense compound
CC specifically hybridizes with and inhibits the expression of Nav1.3. The
CC compound and composition are useful for treating a disease or condition
CC associated with Nav1.3, e.g. pain including but not limited to
CC neuropathic pain, post-herpetic neuralgia, chronic pain, lower back pain,
CC diabetic neuropathy, trigeminal neuropathy, arthritic pain, acute pain,
CC pain from burns, migraine headache, cluster headache, mild-to-moderate
CC headache; seizure disorder such as childhood seizure disorder, including
CC but not limited to neonatal or infantile epilepsy; or ataxia. The present
CC sequence represents a chimeric phosphorothioate oligonucleotide with
CC 2'MOE wings and a deoxy gap. Used during the antisense inhibition of
CC human Nav1.3 expression, the oligonucleotides are designed to target
CC different regions of the human Nav1.3 RNA.
XX
SQ Sequence 20 BP; 5 A; 3 C; 4 G; 8 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 2.3e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 1078 ATTGTTTGACAAATGTTTCT 1097
| |||||||| ||||| |||
Db 1 AGTGTTTGACCAATGTATCT 20

RESULT 315
ADK73795
ID ADK73795 standard; DNA; 20 BP.
XX
AC ADK73795;
XX
DT 20-MAY-2004 (first entry)
XX
DE Chimeric phosphorothioate oligonucleotide to target Nav1.3 #1129.
XX
KW Nav1.3; Analgesic; Nootropic; Neuroprotective; post-herpetic neuralgia;
KW diabetic neuropathy; arthritic pain; migraine headache;
KW infantile epilepsy; ataxia; ss.
XX
OS Synthetic.
XX
PN WO2004016754-A2.
XX
PD 26-FEB-2004.
XX

PF 14-AUG-2003; 2003WO-US025465.
XX
PR 14-AUG-2002; 2002US-0403416P.
XX
PA (PHAA) PHARMACIA CORP.
XX
PI Roberds SL;
XX
DR WPI; 2004-203785/19.
XX
PT New antisense compound targeted to a nucleic acid molecule encoding
PT Nav1.3, useful for useful for treating a disease or condition associated
PT with Nav1.3, e.g. pain, seizure disorder such as childhood seizure
PT disorder, or ataxia.
XX
PS Claim 4; SEQ ID NO 1129; 417pp; English.
XX
CC The present invention relates to an antisense compound targeted to a
CC nucleic acid molecule encoding Nav1.3, where the antisense compound
CC specifically hybridizes with and inhibits the expression of Nav1.3. The
CC compound and composition are useful for treating a disease or condition
CC associated with Nav1.3, e.g. pain including but not limited to
CC neuropathic pain, post-herpetic neuralgia, chronic pain, lower back pain,
CC diabetic neuropathy, trigeminal neuropathy, arthritic pain, acute pain,
CC pain from burns, migraine headache, cluster headache, mild-to-moderate
CC headache; seizure disorder such as childhood seizure disorder, including
CC but not limited to neonatal or infantile epilepsy; or ataxia. The present
CC sequence represents a chimeric phosphorothioate oligonucleotide with
CC 2'MOE wings and a deoxy gap. Used during the antisense inhibition of
CC human Nav1.3 expression, the oligonucleotides are designed to target
CC different regions of the human Nav1.3 RNA.
XX
SQ Sequence 20 BP; 4 A; 2 C; 5 G; 9 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 2.3e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 1074 TTTAATTGTTTGACAAATGT 1093
||| | |||||||| |||||
Db 1 TTTGAGTGTTTGACCAATGT 20

RESULT 316
ADK74411
ID ADK74411 standard; DNA; 20 BP.
XX
AC ADK74411;
XX
DT 20-MAY-2004 (first entry)
XX
DE Chimeric phosphorothioate oligonucleotide to target Nav1.3 #1745.
XX
KW Nav1.3; Analgesic; Nootropic; Neuroprotective; post-herpetic neuralgia;
KW diabetic neuropathy; arthritic pain; migraine headache;
KW infantile epilepsy; ataxia; ss.
XX
OS Synthetic.
XX
PN WO2004016754-A2.
XX
PD 26-FEB-2004.
XX
PF 14-AUG-2003; 2003WO-US025465.
XX
PR 14-AUG-2002; 2002US-0403416P.
XX
PA (PHAA) PHARMACIA CORP.
XX
PI Roberds SL;
XX
DR WPI; 2004-203785/19.
XX
PT New antisense compound targeted to a nucleic acid molecule encoding
PT Nav1.3, useful for useful for treating a disease or condition associated
PT with Nav1.3, e.g. pain, seizure disorder such as childhood seizure
PT disorder, or ataxia.
XX
PS Claim 4; SEQ ID NO 1745; 417pp; English.
XX
CC The present invention relates to an antisense compound targeted to a
CC nucleic acid molecule encoding Nav1.3, where the antisense compound
CC specifically hybridizes with and inhibits the expression of Nav1.3. The
CC compound and composition are useful for treating a disease or condition
CC associated with Nav1.3, e.g. pain including but not limited to
CC neuropathic pain, post-herpetic neuralgia, chronic pain, lower back pain,
CC diabetic neuropathy, trigeminal neuropathy, arthritic pain, acute pain,
CC pain from burns, migraine headache, cluster headache, mild-to-moderate
CC headache; seizure disorder such as childhood seizure disorder, including
CC but not limited to neonatal or infantile epilepsy; or ataxia. The present
CC sequence represents a chimeric phosphorothioate oligonucleotide with
CC 2'MOE wings and a deoxy gap. Used during the antisense inhibition of
CC human Nav1.3 expression, the oligonucleotides are designed to target
CC different regions of the human Nav1.3 RNA.
XX
SQ Sequence 20 BP; 5 A; 2 C; 5 G; 8 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 2.3e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 254 GGAGGTGGTTCCTAATATTA 273
| |||||||| ||| |||||
Db 1 GTAGGTGGTTACTACTATTA 20

RESULT 317
ADK19046
ID ADK19046 standard; DNA; 20 BP.
XX
AC ADK19046;
XX
DT 20-MAY-2004 (first entry)
XX
DE Immunostimulatory nucleic acid #93.
XX
KW immunostimulatory nucleic acid; asthma; allergy; cancer;
KW infectious disease; autoimmune disease; airway remodeling;
KW chronic obstructive pulmonary disease; asthma; IL-6; interleukin-6;
KW TNFalpha; tumour necrosis factor alpha; IFNalpha; interferon-alpha;
KW IFNgamma; interferon-gamma; IP-10; interferon inducible protein;
KW viral infection; bacteria infection; parasitic infection; ss.
XX
OS Synthetic.
XX
PN WO2004016805-A2.
XX
PD 26-FEB-2004.
XX
PF 19-AUG-2003; 2003WO-US025935.
XX
PR 19-AUG-2002; 2002US-0404479P.
PR 19-AUG-2002; 2002US-0404820P.
PR 27-NOV-2002; 2002US-0429701P.
PR 14-FEB-2003; 2003US-0447377P.
XX
PA (COLE-) COLEY PHARM GROUP INC.
PA (COLE-) COLEY PHARM GMBH.
XX
PI Krieg AM, Samulowitz U, Vollmer J, Uhlmann E, Jurk M, Lipford G;
PI Rankin R;
XX
DR WPI; 2004-257200/24.
XX
PT New immunostimulatory nucleic acid molecule having pyrimidine-purine
PT dinucleotide and a chimeric backbone, useful in treating and preventing

PT asthma, allergy, cancer, infectious disease, autoimmune disease or airway
PT remodeling.
XX
PS Claim 4; SEQ ID NO 93; 276pp; English.
XX
CC The invention relates to an immunostimulatory nucleic acid molecule
CC comprising an internal pyrimidine-purine (YZ) dinucleotide and chimeric
CC backbone, where one internal YZ dinucleotide has a phosphodiester(-like)
CC internucleotide linkage, where optionally each additional internal YZ
CC dinucleotide has a phosphodiester(-like) or stabilised internucleotide
CC linkage, where other internucleotide linkages are stabilised. The
CC oligonucleotide is useful in stimulating or modulating an immune
CC response. The medicament shifts the immune response to a Th1 biased
CC response from a Th2 biased response. The oligonucleotide is also useful
CC in the manufacture of a medicament for treating asthma, allergy, cancer,
CC infectious disease, autoimmune disease, airway remodeling or chronic
CC obstructive pulmonary disease or in treating a subject who is a smoker or
CC who is free of symptoms of asthma. The oligonucleotide is useful in
CC inducing cytokine expression, e.g. IL-6 (interleukin-6), TNFalpha (tumour
CC necrosis factor alpha), IFNalpha (interferon-alpha), IFNgamma (interferon
CC -gamma) and IP-10 (interferon inducible protein). The oligonucleotide is
CC also useful in treating and preventing infections caused by viruses,
CC bacteria and parasites. The present sequence represents an
CC immunostimulatory nucleic acid.
XX
SQ Sequence 20 BP; 0 A; 2 C; 2 G; 16 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 2.3e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

```
Qy       3326 TTTTCATTTTTTTACGTCTT 3345
              ||||| ||||||| ||| ||
Db          1 TTTTCGTTTTTTTTCGTTTT 20
```

RESULT 318
ADO45397/c
ID ADO45397 standard; DNA; 20 BP.
XX
AC ADO45397;
XX
DT 15-JUL-2004 (first entry)
XX
DE Human oligonucleotide #763.
XX
KW Human; ss; interleukin-4 receptor; IL-4; interleukin-5 receptor; IL-5;
KW CCR1; CCR3; Eotaxin-1; RANTES; MCP4; CD23; ICAM; VCAM; tryptase a;
KW tryptase b; PDE4 A; PDE4 B; PDE4 C; PDE4 D; respiratory disease;
KW lung disease; hyper-responsiveness; adenosine; adenosine A receptor;
KW asthma; lung allergy; inflammation; inflammatory disease;
KW airway inflammation; allergy; impeded respiration; cystic fibrosis; CF;
KW chronic obstructive pulmonary disease; COPD; allergic rhinitis;
KW acute respiratory distress syndrome; pulmonary hypertension;
KW lung inflammation; bronchitis; airway obstruction; bronchoconstriction.
XX
OS Homo sapiens.
XX
PN US2004049022-A1.
XX
PD 11-MAR-2004.
XX
PF 25-JUL-2003; 2003US-00627930.
XX
PR 23-APR-2002; 2002WO-US013135.
PR 23-APR-2002; 2002WO-US013143.
XX
PA (NYCE/) NYCE J W.
PA (SAND/) SANDRASAGRA A.
PA (TANG/) TANG L.
PA (AGUI/) AGUILAR D.
PA (MILL/) MILLER S.
PA (SHAH/) SHAHABUDDIN S.
PA (LUHH/) LU H.
PA (CONG/) CONG H.
XX
PI Nyce JW, Sandrasagra A, Tang L, Aguilar D, Miller S;
PI Shahabuddin S, Lu H, Cong H;
XX
DR WPI; 2004-293804/27.
XX
PT Novel single or multiple target oligonucleotide anti-sense to e.g.
PT initiation codon, intron of respiratory disease-relevant gene e.g. CCR1,
PT RANTES, MCP4, useful for prophylaxis or treating respiratory disease e.g.
PT asthma.
XX
PS Claim 2; SEQ ID NO 763; 174pp; English.
XX
CC The invention relates to oligonucleotides anti-sense to an initiation
CC codon, coding region, 5' or 3' intron-exon junction, intron or region
CC with 2-10 nucleotides of the 5'-end or 3'-end of a nucleic acid target
CC chosen from a gene encoding interleukin (IL)-4 receptor, interleukin (IL)
CC -5 receptor, CCR1, CCR3, Eotaxin-1, RANTES, MCP4, CD23, ICAM, VCAM,
CC tryptase a, tryptase b, PDE4 A, PDE4 B, PDE4 C or PDE4 D. The invention
CC also relates to a method of screening a candidate compound that binds to
CC one or more nucleic acid target(s) or expressed product(s), for the
CC prevention and/or treatment of a respiratory or lung disease. The
CC oligonucleotides are useful for reducing or inhibiting expression of a
CC gene or mRNA encoding interleukin-4 receptor, interleukin-5 receptor,
CC CCR1, CCR3, Eotaxin-1, RANTES, MCP4, CD23, ICAM, VCAM, tryptase a,
CC tryptase b, PDE4 A, PDE4 B, PDE4 C, or PDE4 D. The oligonucleotides are
CC useful for preventing or treating a respiratory or lung disease. The
CC respiratory or lung disease is associated with hyper-responsiveness to
CC and/or increased levels of, adenosine and/or levels of adenosine A
CC receptor(s), and/or asthma and/or lung allergies associated with
CC inflammation or an inflammatory disease. The respiratory or lung disease
CC is chosen from airway inflammation, allergy, asthma, impeded respiration,
CC cystic fibrosis (CF), chronic obstructive pulmonary disease (COPD),
CC allergic rhinitis, acute respiratory distress syndrome, pulmonary
CC hypertension, lung inflammation, bronchitis, airway obstruction or
CC bronchoconstriction. This sequence represents an oligonucleotide of the
CC invention.
XX
SQ Sequence 20 BP; 5 A; 6 C; 5 G; 4 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 2.3e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

```
Qy       3184 TCTCCTTACAGAGGTTAAAG 3203
              ||||||| |||||| | |||
Db         20 TCTCCTTGCAGAGGCTGAAG 1
```

RESULT 319
ADO45910
ID ADO45910 standard; DNA; 20 BP.
XX
AC ADO45910;
XX
DT 15-JUL-2004 (first entry)
XX
DE Human oligonucleotide #1276.
XX
KW Human; ss; interleukin-4 receptor; IL-4; interleukin-5 receptor; IL-5;
KW CCR1; CCR3; Eotaxin-1; RANTES; MCP4; CD23; ICAM; VCAM; tryptase a;
KW tryptase b; PDE4 A; PDE4 B; PDE4 C; PDE4 D; respiratory disease;
KW lung disease; hyper-responsiveness; adenosine; adenosine A receptor;
KW asthma; lung allergy; inflammation; inflammatory disease;
KW airway inflammation; allergy; impeded respiration; cystic fibrosis; CF;
KW chronic obstructive pulmonary disease; COPD; allergic rhinitis;
KW acute respiratory distress syndrome; pulmonary hypertension;
KW lung inflammation; bronchitis; airway obstruction; bronchoconstriction.
XX
OS Homo sapiens.
XX

PN US2004049022-A1.
XX
PD 11-MAR-2004.
XX
PF 25-JUL-2003; 2003US-00627930.
XX
PR 23-APR-2002; 2002WO-US013135.
PR 23-APR-2002; 2002WO-US013143.
XX
PA (NYCE/) NYCE J W.
PA (SAND/) SANDRASAGRA A.
PA (TANG/) TANG L.
PA (AGUI/) AGUILAR D.
PA (MILL/) MILLER S.
PA (SHAH/) SHAHABUDDIN S.
PA (LUHH/) LU H.
PA (CONG/) CONG H.
XX
PI Nyce JW, Sandrasagra A, Tang L, Aguilar D, Miller S;
PI Shahabuddin S, Lu H, Cong H;
XX
DR WPI; 2004-293804/27.
XX
PT Novel single or multiple target oligonucleotide anti-sense to e.g.
PT initiation codon, intron of respiratory disease-relevant gene e.g. CCR1,
PT RANTES, MCP4, useful for prophylaxis or treating respiratory disease e.g.
PT asthma.
XX
PS Claim 2; SEQ ID NO 1277; 174pp; English.
XX
CC The invention relates to oligonucleotides anti-sense to an initiation
CC codon, coding region, 5' or 3' intron-exon junction, intron or region
CC with 2-10 nucleotides of the 5'-end or 3'-end of a nucleic acid target
CC chosen from a gene encoding interleukin (IL)-4 receptor, interleukin (IL)
CC -5 receptor, CCR1, CCR3, Eotaxin-1, RANTES, MCP4, CD23, ICAM, VCAM,
CC tryptase a, tryptase b, PDE4 A, PDE4 B, PDE4 C or PDE4 D. The invention
CC also relates to a method of screening a candidate compound that binds to
CC one or more nucleic acid target(s) or expressed product(s), for the
CC prevention and/or treatment of a respiratory or lung disease. The
CC oligonucleotides are useful for reducing or inhibiting expression of a
CC gene or mRNA encoding interleukin-4 receptor, interleukin-5 receptor,
CC CCR1, CCR3, Eotaxin-1, RANTES, MCP4, CD23, ICAM, VCAM, tryptase a,
CC tryptase b, PDE4 A, PDE4 B, PDE4 C, or PDE4 D. The oligonucleotides are
CC useful for preventing or treating a respiratory or lung disease. The
CC respiratory or lung disease is associated with hyper-responsiveness to
CC and/or increased levels of, adenosine and/or levels of adenosine A
CC receptor(s), and/or asthma and/or lung allergies associated with
CC inflammation or an inflammatory disease. The respiratory or lung disease
CC is chosen from airway inflammation, allergy, asthma, impeded respiration,
CC cystic fibrosis (CF), chronic obstructive pulmonary disease (COPD),
CC allergic rhinitis, acute respiratory distress syndrome, pulmonary
CC hypertension, lung inflammation, bronchitis, airway obstruction or
CC bronchoconstriction. This sequence represents an oligonucleotide of the
CC invention.
XX
SQ Sequence 20 BP; 5 A; 3 C; 8 G; 4 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 2.3e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

```
Qy       3750 TTTAGGGAGACACAGATGGC 3769
              || |||| |||||||||| |
Db          1 TTGAGGGGGACACAGATGTC 20
```

RESULT 320
ADO46813
ID ADO46813 standard; DNA; 20 BP.
XX
AC ADO46813;
XX
DT 15-JUL-2004 (first entry)
XX
DE Human oligonucleotide #2179.
XX
KW Human; ss; interleukin-4 receptor; IL-4; interleukin-5 receptor; IL-5;
KW CCR1; CCR3; Eotaxin-1; RANTES; MCP4; CD23; ICAM; VCAM; tryptase a;
KW tryptase b; PDE4 A; PDE4 B; PDE4 C; PDE4 D; respiratory disease;
KW lung disease; hyper-responsiveness; adenosine; adenosine A receptor;
KW asthma; lung allergy; inflammation; inflammatory disease;
KW airway inflammation; allergy; impeded respiration; cystic fibrosis; CF;
KW chronic obstructive pulmonary disease; COPD; allergic rhinitis;
KW acute respiratory distress syndrome; pulmonary hypertension;
KW lung inflammation; bronchitis; airway obstruction; bronchoconstriction.
XX
OS Homo sapiens.
XX
PN US2004049022-A1.
XX
PD 11-MAR-2004.
XX
PF 25-JUL-2003; 2003US-00627930.
XX
PR 23-APR-2002; 2002WO-US013135.
PR 23-APR-2002; 2002WO-US013143.
XX
PA (NYCE/) NYCE J W.
PA (SAND/) SANDRASAGRA A.
PA (TANG/) TANG L.
PA (AGUI/) AGUILAR D.
PA (MILL/) MILLER S.
PA (SHAH/) SHAHABUDDIN S.
PA (LUHH/) LU H.
PA (CONG/) CONG H.
XX
PI Nyce JW, Sandrasagra A, Tang L, Aguilar D, Miller S;
PI Shahabuddin S, Lu H, Cong H;
XX
DR WPI; 2004-293804/27.
XX
PT Novel single or multiple target oligonucleotide anti-sense to e.g.
PT initiation codon, intron of respiratory disease-relevant gene e.g. CCR1,
PT RANTES, MCP4, useful for prophylaxis or treating respiratory disease e.g.
PT asthma.
XX
PS Claim 2; SEQ ID NO 2279; 174pp; English.
XX
CC The invention relates to oligonucleotides anti-sense to an initiation
CC codon, coding region, 5' or 3' intron-exon junction, intron or region
CC with 2-10 nucleotides of the 5'-end or 3'-end of a nucleic acid target
CC chosen from a gene encoding interleukin (IL)-4 receptor, interleukin (IL)
CC -5 receptor, CCR1, CCR3, Eotaxin-1, RANTES, MCP4, CD23, ICAM, VCAM,
CC tryptase a, tryptase b, PDE4 A, PDE4 B, PDE4 C or PDE4 D. The invention
CC also relates to a method of screening a candidate compound that binds to
CC one or more nucleic acid target(s) or expressed product(s), for the
CC prevention and/or treatment of a respiratory or lung disease. The
CC oligonucleotides are useful for reducing or inhibiting expression of a
CC gene or mRNA encoding interleukin-4 receptor, interleukin-5 receptor,
CC CCR1, CCR3, Eotaxin-1, RANTES, MCP4, CD23, ICAM, VCAM, tryptase a,
CC tryptase b, PDE4 A, PDE4 B, PDE4 C, or PDE4 D. The oligonucleotides are
CC useful for preventing or treating a respiratory or lung disease. The
CC respiratory or lung disease is associated with hyper-responsiveness to
CC and/or increased levels of, adenosine and/or levels of adenosine A
CC receptor(s), and/or asthma and/or lung allergies associated with
CC inflammation or an inflammatory disease. The respiratory or lung disease
CC is chosen from airway inflammation, allergy, asthma, impeded respiration,
CC cystic fibrosis (CF), chronic obstructive pulmonary disease (COPD),
CC allergic rhinitis, acute respiratory distress syndrome, pulmonary
CC hypertension, lung inflammation, bronchitis, airway obstruction or
CC bronchoconstriction. This sequence represents an oligonucleotide of the
CC invention.
XX
SQ Sequence 20 BP; 9 A; 6 C; 3 G; 2 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.2; DB 1; Length 20;

```
  Best Local Similarity   85.0%;  Pred. No. 2.3e+02;
  Matches   17;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       2873 AAAATACAGAGTCTTCCAGG 2892
              |||| ||||| || ||||||
Db          1 AAAACACAGAATCCTCCAGG 20


RESULT 321
ADN30046/c
ID   ADN30046 standard; DNA; 20 BP.
XX
AC   ADN30046;
XX
DT   12-AUG-2004  (first entry)
XX
DE   Human cytokine-inducible kinase antisense oligonucleotide #17.
XX
KW   cytostatic; antisense therapy; cytokine-inducible kinase;
KW   cytokine-inducible kinase inhibitor; antisense technology;
KW   cytokine-inducible kinase expression; hyperproliferative disorder; human;
KW   antisense oligonucleotide; ss.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag=  b
FT                   /mod_base= OTHER
FT                   /note= "OTHER= Phosphorothioate backbone. All cytidines
FT                   are 5-methylcytidines"
FT   modified_base   1. .5
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
FT   modified_base   15. .20
FT                   /*tag=  c
FT                   /mod_base= OTHER
FT                   /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
XX
PN   US2004101857-A1.
XX
PD   27-MAY-2004.
XX
PF   23-NOV-2002; 2002US-00304116.
XX
PR   23-NOV-2002; 2002US-00304116.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Ward DT,  Dobie KW;
XX
DR   WPI; 2004-399685/37.
XX
PT   New antisense oligonucleotides useful for modulating Cytokine-inducible
PT   kinase expression, useful for diagnosing, preventing or treating
PT   conditions associated with aberrant kinase expression e.g.
PT   hyperproliferative disorders.
XX
PS   Example 15; SEQ ID NO 32; 56pp; English.
XX
CC   The invention describes a compound 8-80 nucleobases in length targeted to
CC   a nucleic acid molecule encoding Cytokine-inducible kinase. The compound
CC   specifically hybridises with the nucleic acid molecule encoding Cytokine-
CC   inducible kinase (which comprises a sequence of 2169 bp fully defined in
CC   the specification) and inhibits the expression of Cytokine-inducible
CC   kinase. Also described are: a method of inhibiting the expression of
CC   Cytokine-inducible kinase in cells or tissues, comprising contacting the
CC   cells or tissues with the new compound so that the expression of Cytokine
CC   -inducible kinase is inhibited; a method of screening for a modulator of
CC   Cytokine-inducible kinase, comprising contacting a preferred target
CC   segment of the nucleic acid encoding Cytokine-inducible kinase with one
CC   or more candidate modulators of Cytokine-inducible kinase, and
CC   identifying one or more modulators that modulate the expression of
CC   Cytokine-inducible kinase; a diagnostic method for identifying a disease
CC   state, comprising identifying the presence of Cytokine-inducible kinase
CC   in a sample using at least one of the primers or probe comprising the
CC   nucleotide sequences as mentioned in the specification; a kit or assay
CC   device comprising the above compound; and a method of treating an animal
CC   having a disease or condition associated with Cytokine-inducible kinase,
CC   comprising administering to the animal a therapeutic or prophylactic
CC   amount of the compound so that expression of Cytokine-inducible kinase is
CC   inhibited. The antisense oligonucleotide is useful for inhibiting the
CC   expression of Cytokine-inducible kinase in cells or tissues to prevent or
CC   treat diseases associated with the kinase expression, such as
CC   hyperproliferative disorders. In addition, the compound is used for
CC   diagnostics, prophylaxis, or as research reagents or kits. This sequence
CC   represents a human cytokine-inducible kinase antisense oligonucleotide.
XX
SQ   Sequence 20 BP; 5 A; 9 C; 1 G; 5 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 15.2;  DB 1;  Length 20;
  Best Local Similarity   85.0%;  Pred. No. 2.3e+02;
  Matches   17;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        399 GAACTGCAGGTGCTGGATTT 418
              |||||| |||||  ||||||
Db         20 GAACTGAAGGTGGGGGATTT 1


RESULT 322
ADN30116
ID   ADN30116 standard; DNA; 20 BP.
XX
AC   ADN30116;
XX
DT   12-AUG-2004  (first entry)
XX
DE   Human cytokine-inducible kinase antisense oligonucleotide #87.
XX
KW   cytostatic; antisense therapy; cytokine-inducible kinase;
KW   cytokine-inducible kinase inhibitor; antisense technology;
KW   cytokine-inducible kinase expression; hyperproliferative disorder; human;
KW   antisense oligonucleotide; ss.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag=  b
FT                   /mod_base= OTHER
FT                   /note= "OTHER= Phosphorothioate backbone. All cytidines
FT                   are 5-methylcytidines"
FT   modified_base   1. .5
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
FT   modified_base   15. .20
FT                   /*tag=  c
FT                   /mod_base= OTHER
FT                   /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
XX
PN   US2004101857-A1.
XX
PD   27-MAY-2004.
XX
PF   23-NOV-2002; 2002US-00304116.
XX
PR   23-NOV-2002; 2002US-00304116.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Ward DT,  Dobie KW;
XX
DR   WPI; 2004-399685/37.
XX
```

```
PT   New antisense oligonucleotides useful for modulating Cytokine-inducible
PT   kinase expression, useful for diagnosing, preventing or treating
PT   conditions associated with aberrant kinase expression e.g.
PT   hyperproliferative disorders.
XX
PS   Example 15; SEQ ID NO 102; 56pp; English.
XX
CC   The invention describes a compound 8-80 nucleobases in length targeted to
CC   a nucleic acid molecule encoding Cytokine-inducible kinase. The compound
CC   specifically hybridises with the nucleic acid molecule encoding Cytokine-
CC   inducible kinase (which comprises a sequence of 2169 bp fully defined in
CC   the specification) and inhibits the expression of Cytokine-inducible
CC   kinase. Also described are: a method of inhibiting the expression of
CC   Cytokine-inducible kinase in cells or tissues, comprising contacting the
CC   cells or tissues with the new compound so that the expression of Cytokine
CC   -inducible kinase is inhibited; a method of screening for a modulator of
CC   Cytokine-inducible kinase, comprising contacting a preferred target
CC   segment of the nucleic acid encoding Cytokine-inducible kinase with one
CC   or more candidate modulators of Cytokine-inducible kinase, and
CC   identifying one or more modulators that modulate the expression of
CC   Cytokine-inducible kinase; a diagnostic method for identifying a disease
CC   state, comprising identifying the presence of Cytokine-inducible kinase
CC   in a sample using at least one of the primers or probe comprising the
CC   nucleotide sequences as mentioned in the specification; a kit or assay
CC   device comprising the above compound; and a method of treating an animal
CC   having a disease or condition associated with Cytokine-inducible kinase,
CC   comprising administering to the animal a therapeutic or prophylactic
CC   amount of the compound so that expression of Cytokine-inducible kinase is
CC   inhibited. The antisense oligonucleotide is useful for inhibiting the
CC   expression of Cytokine-inducible kinase in cells or tissues to prevent or
CC   treat diseases associated with the kinase expression, such as
CC   hyperproliferative disorders. In addition, the compound is used for
CC   diagnostics, prophylaxis, or as research reagents or kits. This sequence
CC   represents a human cytokine-inducible kinase antisense oligonucleotide.
XX
SQ   Sequence 20 BP; 5 A; 1 C; 9 G; 5 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 15.2;  DB 1;  Length 20;
  Best Local Similarity   85.0%;  Pred. No. 2.3e+02;
  Matches   17;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        399 GAACTGCAGGTGCTGGATTT 418
              |||||| |||||  ||||||
Db          1 GAACTGAAGGTGGGGGATTT 20


RESULT 323
ADP31773/c
ID   ADP31773 standard; DNA; 20 BP.
XX
AC   ADP31773;
XX
DT   26-AUG-2004  (first entry)
XX
DE   Oestrogen-responsive finger protein antisense oligo seqid 72.
XX
KW   cytostatic; antisense therapy; oestrogen-responsive finger protein;
KW   oestrogen-responsive finger protein associated disorder;
KW   hyperproliferative disorder; diagnostic; prophylaxis; human;
KW   antisense oligonucleotide; antisense technology; ss.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag=  b
FT                   /mod_base= OTHER
FT                   /note= "OTHER= Phosphorothioate backbone. All cytidines
FT                   are 5-methylcytidines"
FT   modified_base   1. .5
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
FT   modified_base   15. .20
FT                   /*tag=  c
FT                   /mod_base= OTHER
FT                   /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
XX
PN   US2004110159-A1.
XX
PD   10-JUN-2004.
XX
PF   10-DEC-2002; 2002US-00317277.
XX
PR   10-DEC-2002; 2002US-00317277.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Dobie KW;
XX
DR   WPI; 2004-440347/41.
XX
PT   New antisense oligonucleotides for modulating estrogen-responsive finger
PT   protein expression, useful for diagnosing, preventing or treating
PT   hyperproliferative disorders.
XX
PS   Example 15; SEQ ID NO 73; 65pp; English.
XX
CC   The invention describes a compound 8-80 nucleobases in length targeted to
CC   a nucleic acid molecule encoding oestrogen-responsive finger protein. The
CC   compound specifically hybridises with the nucleic acid molecule encoding
CC   oestrogen-responsive finger protein (which comprises a sequence of 24295
CC   bp fully defined in the specification) and inhibits the expression of
CC   estrogen-responsive finger protein. Also described are: a method of
CC   inhibiting the expression of oestrogen-responsive finger protein in cells
CC   or tissues; a method of screening for a modulator of oestrogen-responsive
CC   finger protein; a diagnostic method for identifying a disease state; a
CC   kit or assay device comprising the above compound; and a method of
CC   treating an animal having a disease or condition associated with estrogen
CC   -responsive finger protein. The antisense oligonucleotide is useful for
CC   inhibiting the expression of oestrogen-responsive finger protein in cells
CC   or tissues to prevent or treat diseases associated with aberrant
CC   oestrogen-responsive finger protein expression, such as
CC   hyperproliferative disorders. In addition, the compound is used for
CC   diagnostics, prophylaxis, or as research reagents or kits. This sequence
CC   represents a human oestrogen-responsive finger protein antisense
CC   oligonucleotide.
XX
SQ   Sequence 20 BP; 3 A; 5 C; 4 G; 8 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 15.2;  DB 1;  Length 20;
  Best Local Similarity   85.0%;  Pred. No. 2.3e+02;
  Matches   17;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       2479 AGAAGGTGGAGAAGACCCTG 2498
              | || |||||||| ||||||
Db         20 ATAACGTGGAGAAAACCCTG 1


RESULT 324
ADP31848
ID   ADP31848 standard; DNA; 20 BP.
XX
AC   ADP31848;
XX
DT   26-AUG-2004  (first entry)
XX
DE   Oestrogen-responsive finger protein antisense oligo seqid 147.
XX
KW   cytostatic; antisense therapy; oestrogen-responsive finger protein;
KW   oestrogen-responsive finger protein associated disorder;
KW   hyperproliferative disorder; diagnostic; prophylaxis; human;
KW   antisense oligonucleotide; antisense technology; ss.
XX
OS   Homo sapiens.
XX
```

```
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag=  b
FT                   /mod_base= OTHER
FT                   /note= "OTHER= Phosphorothioate backbone. All cytidines
FT                   are 5-methylcytidines"
FT   modified_base   1. .5
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
FT   modified_base   15. .20
FT                   /*tag=  c
FT                   /mod_base= OTHER
FT                   /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
XX
PN   US2004110159-A1.
XX
PD   10-JUN-2004.
XX
PF   10-DEC-2002; 2002US-00317277.
XX
PR   10-DEC-2002; 2002US-00317277.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Dobie KW;
XX
DR   WPI; 2004-440347/41.
XX
PT   New antisense oligonucleotides for modulating estrogen-responsive finger
PT   protein expression, useful for diagnosing, preventing or treating
PT   hyperproliferative disorders.
XX
PS   Example 15; SEQ ID NO 148; 65pp; English.
XX
CC   The invention describes a compound 8-80 nucleobases in length targeted to
CC   a nucleic acid molecule encoding oestrogen-responsive finger protein. The
CC   compound specifically hybridises with the nucleic acid molecule encoding
CC   oestrogen-responsive finger protein (which comprises a sequence of 24295
CC   bp fully defined in the specification) and inhibits the expression of
CC   estrogen-responsive finger protein. Also described are: a method of
CC   inhibiting the expression of oestrogen-responsive finger protein in cells
CC   or tissues; a method of screening for a modulator of oestrogen-responsive
CC   finger protein; a diagnostic method for identifying a disease state; a
CC   kit or assay device comprising the above compound; and a method of
CC   treating an animal having a disease or condition associated with estrogen
CC   -responsive finger protein. The antisense oligonucleotide is useful for
CC   inhibiting the expression of oestrogen-responsive finger protein in cells
CC   or tissues to prevent or treat diseases associated with aberrant
CC   oestrogen-responsive finger protein expression, such as
CC   hyperproliferative disorders. In addition, the compound is used for
CC   diagnostics, prophylaxis, or as research reagents or kits. This sequence
CC   represents a human oestrogen-responsive finger protein antisense
CC   oligonucleotide.
XX
SQ   Sequence 20 BP; 8 A; 4 C; 5 G; 3 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 15.2;  DB 1;  Length 20;
  Best Local Similarity   85.0%;  Pred. No. 2.3e+02;
  Matches   17;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       2479 AGAAGGTGGAGAAGACCCTG 2498
              | || |||||||| ||||||
Db          1 ATAACGTGGAGAAAACCCTG 20


RESULT 325
ADP49542
ID   ADP49542 standard; DNA; 20 BP.
XX
AC   ADP49542;
XX
DT   26-AUG-2004  (first entry)
XX
DE   Human BAF53 antisense oligonucleotide ISIS280335.
XX
KW   Human; ss; antisense; chromatin; BAF complex; BRG1/brm-associated factor;
KW   BAF53; BRG1-associated factor 53kDa; cancer; tumour;
KW   actin-related protein; hyperproliferative disorder.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag=  b
FT                   /mod_base= OTHER
FT                   /note= "Phosphorothioate backbone and all cytidines are 5
FT                   -methylcytidines"
FT   modified_base   1. .5
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethyl residue"
FT   modified_base   16. .20
FT                   /*tag=  c
FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethyl residue"
XX
PN   US2004110147-A1.
XX
PD   10-JUN-2004.
XX
PF   09-DEC-2002; 2002US-00316243.
XX
PR   09-DEC-2002; 2002US-00316243.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Dobie KW,  Jain R;
XX
DR   WPI; 2004-440336/41.
XX
PT   New oligonucleotide compound that inhibits expression of BAF53, useful
PT   for preparing a composition for treating hyperproliferative disorder,
PT   e.g. cancer.
XX
PS   Example 15; SEQ ID NO 29; 72pp; English.
XX
CC   The invention relates to a compound, having a sequence comprising 8-80 bp
CC   targeted to a nucleic acid encoding BAF53 (a member of the BAF complex
CC   (BRG1/brm-associated factor), BRG1-associated factor 53kDa which is an
CC   actin-related protein), specifically hybridises with the nucleic acid
CC   encoding BAF53 comprising 28001-bp sequence (derived from human
CC   chromosome 3) and inhibits expression of BAF53, i.e. an antisense
CC   oligonucleotide. Also included are inhibiting the expression of BAF53 in
CC   cells or tissues, screening for a modulator of BAF53, a diagnostic method
CC   for identifying a disease state, a kit or assay device comprising the
CC   compound and treating an animal having a disease or condition associated
CC   with BAF53. The oligonucleotide compound is useful for preparing a
CC   composition for treating hyperproliferative disorder), e.g. cancer or a
CC   tumour. The present sequence is an antisense oligonucleotide targeting
CC   human BAF53.
XX
SQ   Sequence 20 BP; 2 A; 7 C; 2 G; 9 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 15.2;  DB 1;  Length 20;
  Best Local Similarity   85.0%;  Pred. No. 2.3e+02;
  Matches   17;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       3438 ACTCTGTCACTTTGTCACTC 3457
              ||||||||| ||| || |||
Db          1 ACTCTGTCAGTTTCTCTCTC 20


RESULT 326
ADP49620/c
ID   ADP49620 standard; DNA; 20 BP.
```

XX
AC ADP49620;
XX
DT 26-AUG-2004 (first entry)
XX
DE Human BAF53 antisense oligonucleotide target region #10.
XX
KW Human; ds; antisense; chromatin; BAF complex; BRG1/brm-associated factor;
KW BAF53; BRG1-associated factor 53kDa; cancer; tumour;
KW actin-related protein; hyperproliferative disorder; chromosome 3.
XX
OS Homo sapiens.
XX
PN US2004110147-A1.
XX
PD 10-JUN-2004.
XX
PF 09-DEC-2002; 2002US-00316243.
XX
PR 09-DEC-2002; 2002US-00316243.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Dobie KW, Jain R;
XX
DR WPI; 2004-440336/41.
XX
PT New oligonucleotide compound that inhibits expression of BAF53, useful
PT for preparing a composition for treating hyperproliferative disorder,
PT e.g. cancer.
XX
PS Example 15; SEQ ID NO 107; 72pp; English.
XX
CC The invention relates to a compound, having a sequence comprising 8-80 bp
CC targeted to a nucleic acid encoding BAF53 (a member of the BAF complex
CC (BRG1/brm-associated factor), BRG1-associated factor 53kDa which is an
CC actin-related protein), specifically hybridises with the nucleic acid
CC encoding BAF53 comprising 28001-bp sequence (derived from human
CC chromosome 3) and inhibits expression of BAF53, i.e. an antisense
CC oligonucleotide. Also included are inhibiting the expression of BAF53 in
CC cells or tissues, screening for a modulator of BAF53, a diagnostic method
CC for identifying a disease state, a kit or assay device comprising the
CC compound and treating an animal having a disease or condition associated
CC with BAF53. The oligonucleotide compound is useful for preparing a
CC composition for treating hyperproliferative disorder, e.g. cancer or a
CC tumour. The BAF53 gene is located on chromosome 3. The present sequence
CC is a BAF53 genomic DNA target sequence for an antisense oligonucleotides.
XX
SQ Sequence 20 BP; 9 A; 2 C; 7 G; 2 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 2.3e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 3438 ACTCTGTCACTTTGTCACTC 3457
||||||||| ||| || |||
Db 20 ACTCTGTCAGTTTCTCTCTC 1

RESULT 327
ADP49161
ID ADP49161 standard; DNA; 20 BP.
XX
AC ADP49161;
XX
DT 09-SEP-2004 (first entry)
XX
DE Human nicotinic receptor alpha 7 antisense nested PCR primer.
XX
KW ss; proinflammatory cytokine; appendicitis; cholinergic agonist;
KW alpha-7 nicotinic receptor; antiinflammatory; gastrointestinal;
KW antiulcer; hepatotropic; virucide; antiasthmatic; antiallergic;
KW antibacterial; immunosuppressive; vasotropic; vulnerary; antipyretic;
KW immunomodulator; gynaecological; respiratory; CNS; anti-HIV; fungicide;
KW antimalarial; antianginal; cardiant; antiarteriosclerotic; thrombolytic;
KW antirheumatic; neuroprotective; analgesic; muscular; antiarthritic;
KW ophthalmological; cytostatic; osteopathic; antigout; antithyroid;
KW dermatological; nephrotropic; uropathic; nootropic; antidiabetic;
KW antipsoriatic; gastrointestinal disease; systemic disease;
KW local inflammatory disease; urogenital system; respiratory system;
KW infection; dermatological disease; skin condition;
KW cardiovascular system disorder; central nervous system;
KW peripheral nervous system; bone; joint; muscle; connective tissue;
KW autoimmune disorder; inflammatory disorder; cancer; tumour;
KW proliferative disorder; primer; nested PCR; nicotinic receptor;
KW alpha 1 subunit.
XX
OS Homo sapiens.
XX
PN WO2004052365-A2.
XX
PD 24-JUN-2004.
XX
PF 05-DEC-2003; 2003WO-US038708.
XX
PR 06-DEC-2002; 2002US-0431650P.
XX
PA (NSHO-) NORTH SHORE-LONG ISLAND JEWISH RES.
XX
PI Tracey KJ, Wang H;
XX
DR WPI; 2004-468700/44.
XX
PT Treatment of a condition e.g. allergy mediated by release of
PT proinflammatory cytokine involves treating a patient with a cholinergic
PT agonist selective for an alpha-7 nicotinic receptor to decrease the
PT released amount of the cytokine.
XX
PS Example 1; Page 40; 75pp; English.
XX
CC The invention relates to a novel method for treatment of a patient
CC suffering from a condition mediated by release of proinflammatory
CC cytokine e.g. appendicitis involving treating a patient with a
CC cholinergic agonist (a1) selective for an alpha-7 nicotinic receptor to
CC decrease the amount of the proinflammatory cytokine which is released
CC from a macrophage. A cholinergic agonist has antiinflammatory,
CC gastrointestinal, antiulcer, hepatotropic, virucide, antiasthmatic,
CC antiallergic, antibacterial, immunosuppressive, vasotropic, vulnerary,
CC antipyretic, immunomodulator, gynaecological, respiratory, CNS, anti-HIV,
CC fungicide, antimalarial, antianginal, cardiant, antiarteriosclerotic,
CC thrombolytic, antirheumatic, neuroprotective, analgesic, muscular,
CC antiarthritic, ophthalmological, cytostatic, osteopathic, antigout,
CC antithyroid, dermatological, nephrotropic, uropathic, nootropic,
CC antidiabetic, and antipsoriatic activity. A compound of the invention is
CC useful for the treatment of diseases involving the gastrointestinal tract
CC and associated tissues, systemic or local inflammatory diseases and
CC conditions, diseases involving the urogenital system and associated
CC tissues, diseases involving the respiratory system and associated
CC tissues, diseases arising from infection by various viruses, bacteria,
CC fungi, and protozoal and multicellular parasites, dermatological diseases
CC and conditions of the skin, diseases involving the cardiovascular system
CC and associated tissues, diseases involving the central or peripheral
CC nervous system and associated tissues, diseases of the bones, joints,
CC muscles and connective tissues, autoimmune and inflammatory disorders, as
CC well as various cancers, tumours and proliferative disorders. The present
CC sequence represents a nested PCR primer used in the invention to amplify
CC a subunit of a nicotinic receptor.
XX
SQ Sequence 20 BP; 6 A; 3 C; 7 G; 4 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 2.3e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 2476 TGCAGAAGGTGGAGAAGACC 2495
|||||| | ||| |||||||

```
Db          1 TGCAGATGATGGTGAAGACC 20


RESULT 328
ADP84370/c
ID   ADP84370 standard; DNA; 20 BP.
XX
AC   ADP84370;
XX
DT   23-SEP-2004  (first entry)
XX
DE   5' donor site at the exon 9 splice junction of human AAA1 DNA.
XX
KW   ss; AST-1; asthma; IgE mediated disease; human; GPRA;
KW   G-protein coupled receptor for asthma susceptibility; AAA1;
KW   asthma associated alternatively spliced gene 1;
KW   chronic obstructive pulmonary disease; cancer; rhinitis; dermatitis;
KW   cytostatic; antiasthmatic; transgenic; asthma locus-1.
XX
OS   Homo sapiens.
XX
PN   WO2004056866-A1.
XX
PD   08-JUL-2004.
XX
PF   19-DEC-2003; 2003WO-FI000973.
XX
PR   20-DEC-2002; 2002US-0435846P.
PR   03-JAN-2003; 2003US-0437895P.
PR   26-MAR-2003; 2003US-0458767P.
PR   09-JUL-2003; 2003US-0486000P.
XX
PA   (GENE-) GENEOS OY.
XX
PI   Laitinen T,  Kere J,  Laitinen LA,  Polvi A,  Maekelae S,  Vendelin J;
PI   Pulkkinen V,  Salmikangas P;
XX
DR   WPI; 2004-500286/47.
XX
PT   New GPRA polypeptides, useful in preparing a composition for diagnosing,
PT   treating or preventing asthma, other IgE-mediated disease, chronic
PT   obstructive pulmonary disease or cancer.
XX
PS   Example 7; Page 83; 265pp; English.
XX
CC   This invention relates to the identification of a novel susceptibility
CC   locus AST-1 for asthma and other IgE mediated diseases mapped to the
CC   human chromosome 7p14-p15. Specifically, it refers to two overlapping
CC   genes namely GPRA (G-protein coupled receptor for asthma susceptibility)
CC   and AAA1 (asthma associated alternatively spliced gene 1). The present
CC   invention describes identifying single nucleotide polymorphisms, as well
CC   as insertion or deletion polymorphisms, occurring at different positions
CC   in the AST-1 locus, and furthermore providing vectors, host cells,
CC   primers and probes in order to determine the status of an individual.
CC   Accordingly, it provides a kit to diagnose or assess predisposition to
CC   asthma, chronic obstructive pulmonary disease or cancer and other IgE
CC   mediated diseases including rhinitis and dermatitis, such that derived
CC   pharmaceutical compositions exhibit cytostatic and antiasthmatic
CC   activities. Furthermore, it provides a transgenic animal comprising the
CC   asthma locus-1 (AST-1) DNA. This oligonucleotide sequence is a 5' splice
CC   junction of the human AAA1 gene, given in Table 11 of the invention.
XX
SQ   Sequence 20 BP; 4 A; 5 C; 5 G; 6 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 15.2;  DB 1;  Length 20;
  Best Local Similarity   85.0%;  Pred. No. 2.3e+02;
  Matches   17;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       2375 GTCCCAGCACTTCATCCAGA 2394
              |||| |||||||||| |||
Db         20 GTCCAAGCACTTCATGGAGA 1


RESULT 329
ADK22657
ID   ADK22657 standard; DNA; 20 BP.
XX
AC   ADK22657;
XX
DT   18-NOV-2004  (first entry)
XX
DE   Acyl-coenzyme A synthetase 1, ACS1, antisense oligonucleotide #2734.
XX
KW   acyl-coenzyme A synthetase 1; ACS1; diabetes; obesity;
KW   metabolic syndrome X; cardiovascular disorder; cancer; infection;
KW   inflammation; tumour; antisense; ss.
XX
OS   Synthetic.
XX
PN   WO2004016749-A2.
XX
PD   26-FEB-2004.
XX
PF   14-AUG-2003; 2003WO-US025389.
XX
PR   14-AUG-2002; 2002US-0403591P.
XX
PA   (PHAA ) PHARMACIA CORP.
XX
PI   Ross SA;
XX
DR   WPI; 2004-203782/19.
XX
PT   New antisense compounds targeted to nucleic acid molecules encoding acyl-
PT   coenzyme A synthetase 1 (ACS1), useful for treating diseases or
PT   conditions associated with aberrant expression of ACS1, e.g. diabetes,
PT   obesity or cancer.
XX
PS   Claim 3; SEQ ID NO 2734; 940pp; English.
XX
CC   The invention relates to an antisense compound targeted to a nucleic acid
CC   molecule encoding acyl-coenzyme A synthetase 1 (ACS1). The antisense
CC   compound specifically hybridises with and inhibits the expression of
CC   ACS1. The antisense oligonucleotides or compounds are useful for
CC   inhibiting the expression of acyl-coenzyme A synthetase 1 (ACS1), and for
CC   treating diseases or conditions associated with aberrant expression of
CC   ACS1, e.g. diabetes, obesity, metabolic syndrome X, cardiovascular
CC   disorder or cancer. The antisense compounds are also useful as research
CC   reagents and kits, or in diagnostic, therapeutic and prophylactic
CC   applications, e.g. to prevent or delay infection, inflammation or tumour
CC   formation. The present sequence represents an acyl-coenzyme A synthetase
CC   1, ACS1, antisense oligonucleotide.
XX
SQ   Sequence 20 BP; 5 A; 4 C; 6 G; 5 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 15.2;  DB 1;  Length 20;
  Best Local Similarity   85.0%;  Pred. No. 2.3e+02;
  Matches   17;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        396 CCAGAACTGCAGGTGCTGGA 415
              | ||| || ||||||||||
Db          1 CAAGATCTTCAGGTGCTGGA 20


RESULT 330
ADS12549/c
ID   ADS12549 standard; DNA; 20 BP.
XX
AC   ADS12549;
XX
DT   16-DEC-2004  (first entry)
XX
DE   PCR primer E2F used to amplify murine 20-HSD DNA Seq 3.
XX
KW   PCR; ss; 20 alpha-hydration steroid dehydrogenase; 20-HSD;
KW   progesterone metabolism; animal model; miscarriage; livestock;
```

KW reproductive dysbolism; primer.
XX
OS Rattus sp.
XX
PN JP2004261075-A.
XX
PD 24-SEP-2004.
XX
PF 28-FEB-2003; 2003JP-00054612.
XX
PR 28-FEB-2003; 2003JP-00054612.
XX
PA (UYTY) UNIV TOKYO.
XX
DR WPI; 2004-665472/65.
XX
PT New gene encoding a protein exhibiting 20(alpha)-hydration steroid
PT dehydrogenation enzyme activity, useful for metabolizing progesterone to
PT inactive 20(alpha)-dihydroprogesterone.
XX
PS Disclosure; SEQ ID NO 3; 43pp; Japanese.
XX
CC This invention relates to a novel gene that encodes a protein exhibiting
CC 20 alpha-hydration steroid dehydrogenase (20-HSD) activity, an enzyme
CC involved in progesterone metabolism. Specifically, it refers to a mouse
CC animal model that lacks the gene encoding this enzyme, and hence provides
CC a model that can be used for the study of miscarriage resulting from the
CC progesterone dysbolism of a parent or offspring. The present invention
CC describes progesterone dysbolism as a cause of miscarriage in meal
CC resource animals in the livestock farming industry, such that it provides
CC a route to investigate a treatment method and/ or an early check up
CC method with respect to reproductive disturbances occurring in these
CC animals. This oligonucleotide sequence is a PCR primer given in an
CC exemplification of the invention.
XX
SQ Sequence 20 BP; 9 A; 2 C; 4 G; 5 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 2.3e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

```
Qy       1882 TCTTAAATCTTACTCAGAAT 1901
              |||| |||||| || |||||
Db         20 TCTTCAATCTTGCTTAGAAT 1
```

RESULT 331
ADS12558
ID ADS12558 standard; DNA; 20 BP.
XX
AC ADS12558;
XX
DT 16-DEC-2004 (first entry)
XX
DE PCR primer E2R used to amplify murine 20-HSD DNA Seq 12.
XX
KW PCR; ss; 20 alpha-hydration steroid dehydrogenase; 20-HSD;
KW progesterone metabolism; animal model; miscarriage; livestock;
KW reproductive dysbolism; primer.
XX
OS Mus musculus.
XX
PN JP2004261075-A.
XX
PD 24-SEP-2004.
XX
PF 28-FEB-2003; 2003JP-00054612.
XX
PR 28-FEB-2003; 2003JP-00054612.
XX
PA (UYTY) UNIV TOKYO.
XX
DR WPI; 2004-665472/65.
XX
PT New gene encoding a protein exhibiting 20(alpha)-hydration steroid
PT dehydrogenation enzyme activity, useful for metabolizing progesterone to
PT inactive 20(alpha)-dihydroprogesterone.
XX
PS Disclosure; SEQ ID NO 12; 43pp; Japanese.
XX
CC This invention relates to a novel gene that encodes a protein exhibiting
CC 20 alpha-hydration steroid dehydrogenase (20-HSD) activity, an enzyme
CC involved in progesterone metabolism. Specifically, it refers to a mouse
CC animal model that lacks the gene encoding this enzyme, and hence provides
CC a model that can be used for the study of miscarriage resulting from the
CC progesterone dysbolism of a parent or offspring. The present invention
CC describes progesterone dysbolism as a cause of miscarriage in meal
CC resource animals in the livestock farming industry, such that it provides
CC a route to investigate a treatment method and/ or an early check up
CC method with respect to reproductive disturbances occurring in these
CC animals. This oligonucleotide sequence is a PCR primer given in an
CC exemplification of the invention.
XX
SQ Sequence 20 BP; 5 A; 4 C; 2 G; 9 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 2.3e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

```
Qy       1882 TCTTAAATCTTACTCAGAAT 1901
              |||| |||||| || |||||
Db          1 TCTTCAATCTTGCTTAGAAT 20
```

RESULT 332
ADT00671
ID ADT00671 standard; DNA; 20 BP.
XX
AC ADT00671;
XX
DT 16-DEC-2004 (first entry)
XX
DE Novel mutant protein tyrosine kinase-related oligonucleotide SeqID659.
XX
KW tyrosine kinase; cancer; anti-cancer agent; signalling molecule;
KW tumourigenesis; somatic alteration; colorectal cancer; NTRK3; FES;
KW GUCY2F; MCCK; MLK4; kinase domain; cytostatic; tyrosine kinase inhibitor;
KW guanylate cyclase stimulator; ss.
XX
OS Homo sapiens.
XX
PN WO2004082458-A2.
XX
PD 30-SEP-2004.
XX
PF 18-FEB-2004; 2004WO-US004452.
XX
PR 21-FEB-2003; 2003US-0448537P.
PR 29-MAY-2003; 2003US-0473895P.
XX
PA (UYJO) UNIV JOHNS HOPKINS.
XX
PI Bardelli A, Parsons W, Velculescu V, Kinzler KW, Vogelstein B;
XX
DR WPI; 2004-718702/70.
XX
PT Activated mutant protein tyrosine kinases (e.g. NTRK3, FES and MCCK) and
PT associated methods for diagnosing cancer and screening for anti-cancer
PT agents.
XX
PS Disclosure; SEQ ID NO 659; 363pp; English.
XX
CC This invention relates to a novel activated mutant protein tyrosine
CC kinases and associated methods for diagnosing cancer and screening for
CC anti-cancer agents. Protein kinases are signalling molecules involved in
CC tumourigenesis. Mutational analysis of the human tyrosine kinase gene

```
CC   family identified somatic alteration sin 1 in 5 colorectal cancers, with
CC   the majority of mutations occurring in the NTRK3, FES, GUCY2F and
CC   MCCK/MLK4 genes. Most were identified in the kinase domain. The invention
CC   may be useful for the production of compounds with a cytostatic activity
CC   acting as protein tyrosine kinase inhibitors or guanylate cyclase
CC   stimulators. The invention may be useful for developing methods for
CC   detecting mutations involved in cancer or screening for anti-cancer
CC   agents. The present sequence is that of a human-derived oligonucleotide
CC   which is related to the invention.
XX
SQ   Sequence 20 BP; 1 A; 6 C; 3 G; 10 T; 0 U; 0 Other;

  Query Match              0.4%;  Score 15.2;  DB 1;  Length 20;
  Best Local Similarity   85.0%;  Pred. No. 2.3e+02;
  Matches   17;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       3081 TGTTCACTTTTTCCTTTTTG 3100
              ||| ||||||||||  ||||
Db          1 TGTGCACTTTTTCCCCTTTG 20


RESULT 333
ADT01064/c
ID   ADT01064 standard; DNA; 20 BP.
XX
AC   ADT01064;
XX
DT   16-DEC-2004  (first entry)
XX
DE   Novel mutant protein tyrosine kinase-related oligonucleotide SeqID1052.
XX
KW   tyrosine kinase; cancer; anti-cancer agent; signalling molecule;
KW   tumourigenesis; somatic alteration; colorectal cancer; NTRK3; FES;
KW   GUCY2F; MCCK; MLK4; kinase domain; cytostatic; tyrosine kinase inhibitor;
KW   guanylate cyclase stimulator; ss.
XX
OS   Homo sapiens.
XX
PN   WO2004082458-A2.
XX
PD   30-SEP-2004.
XX
PF   18-FEB-2004; 2004WO-US004452.
XX
PR   21-FEB-2003; 2003US-0448537P.
PR   29-MAY-2003; 2003US-0473895P.
XX
PA   (UYJO ) UNIV JOHNS HOPKINS.
XX
PI   Bardelli A,  Parsons W,  Velculescu V,  Kinzler KW,  Vogelstein B;
XX
DR   WPI; 2004-718702/70.
XX
PT   Activated mutant protein tyrosine kinases (e.g. NTRK3, FES and MCCK) and
PT   associated methods for diagnosing cancer and screening for anti-cancer
PT   agents.
XX
PS   Disclosure; SEQ ID NO 1052; 363pp; English.
XX
CC   This invention relates to a novel activated mutant protein tyrosine
CC   kinases and associated methods for diagnosing cancer and screening for
CC   anti-cancer agents. Protein kinases are signalling molecules involved in
CC   tumourigenesis. Mutational analysis of the human tyrosine kinase gene
CC   family identified somatic alteration sin 1 in 5 colorectal cancers, with
CC   the majority of mutations occurring in the NTRK3, FES, GUCY2F and
CC   MCCK/MLK4 genes. Most were identified in the kinase domain. The invention
CC   may be useful for the production of compounds with a cytostatic activity
CC   acting as protein tyrosine kinase inhibitors or guanylate cyclase
CC   stimulators. The invention may be useful for developing methods for
CC   detecting mutations involved in cancer or screening for anti-cancer
CC   agents. The present sequence is that of a human-derived oligonucleotide
CC   which is related to the invention.
XX
SQ   Sequence 20 BP; 4 A; 3 C; 8 G; 5 T; 0 U; 0 Other;

  Query Match              0.4%;  Score 15.2;  DB 1;  Length 20;
  Best Local Similarity   85.0%;  Pred. No. 2.3e+02;
  Matches   17;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1857 CAGCATTTTCCAAGTAGTCT 1876
              ||||| || |||||||| ||
Db         20 CAGCACTTCCCAAGTAGCCT 1


RESULT 334
AAV36994
ID   AAV36994 standard; DNA; 17 BP.
XX
AC   AAV36994;
XX
DT   24-SEP-1998  (first entry)
XX
DE   Nucleotide sequence of the PCR primer 15.
XX
KW   PCR; primer; amplification; type II diabetes; agonist; antagonist;
KW   hepatic nuclear factor 4; HNF-4; HNF gene; anti-HNF antibody; insulin;
KW   diabetes mellitus; mature onset diabetes of the young; MODY; MODY1 gene;
KW   MODY3 gene; ss.
XX
OS   Synthetic.
XX
PN   WO9821363-A1.
XX
PD   22-MAY-1998.
XX
PF   14-NOV-1997;   97WO-US020759.
XX
PR   15-NOV-1996;   96US-00749430.
XX
PA   (MILL-) MILLENNIUM PHARM INC.
XX
PI   Glucksman AM,  Thomas J;
XX
DR   WPI; 1998-297964/26.
XX
PT   Treating type II diabetes involving hepatic nuclear factor 4 - useful,
PT   e.g. to treat insufficient HNF expression or bioactivity, overexpression
PT   of HNF or expression of mutant HNF gene in diabetic patients.
XX
PS   Disclosure; Page 86; 116pp; English.
XX
CC   This is the nucleotide sequence of the PCR primer used for amplification
CC   in the method of invention, involving the treatment of type II diabetes
CC   with hepatic nuclear factor 4 (HNF-4). The agonists of normal HNF
CC   bioactivity can be used to treat diabetes, e.g. to ameliorate disease
CC   symptoms involving insufficient expression of an HNF gene and/or
CC   inadequate functional HNF bioactivity in a subject. The antagonists of a
CC   disease-causing HNF bioactivity can be used to treat diabetes, e.g. to
CC   ameliorate disease symptoms involving expression of a mutant HNF gene or
CC   overexpression of a normal HNF gene. It is also useful to ameliorate
CC   disease symptoms involving a mutant (non-functional) HNF protein e.g. by
CC   administering a therapeutically effective amount of an anti-HNF antibody.
CC   Protein that binds to the mutant HNF-4 protein is useful in screening
CC   assays, e.g. to identify antagonists/agonists of an interaction between a
CC   HNF protein and a binding protein to develop drugs for disease treatment.
CC   Diabetes mellitus is a common metabolic disorder, and most cases are type
CC   II (non-insulin dependent diabetes mellitus (NIDDM)). A major genetic
CC   component is implicated, but few genes have been identified. Mature onset
CC   diabetes of the young (MODY) loci have been linked to rare early-onset
CC   forms, but genes for MODY1 and MODY3 have not been identified. HNF-4 is
CC   encoded by a gene mapping within the MODY1 locus
XX
SQ   Sequence 17 BP; 2 A; 3 C; 8 G; 4 T; 0 U; 0 Other;

  Query Match              0.4%;  Score 15;  DB 1;  Length 17;
  Best Local Similarity  100.0%;  Pred. No. 1.9e+02;
```

```
  Matches   15; Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        402 CTGCAGGTGCTGGAT 416
              ||||||||||||||||
Db          2 CTGCAGGTGCTGGAT 16


RESULT 335
AAV41419
ID   AAV41419 standard; DNA; 17 BP.
XX
AC   AAV41419;
XX
DT   24-SEP-1998  (first entry)
XX
DE   Nucleotide sequence of 3' PCR primer 18.
XX
KW   PCR; primer; amplification; hepatic nuclear factor; HNF; diabetes;
KW   type II diabetes; HNF1 gene; transcription factor; insulin; ss.
XX
OS   Synthetic.
XX
PN   WO9821239-A2.
XX
PD   22-MAY-1998.
XX
PF   07-NOV-1997;   97WO-US020532.
XX
PR   12-NOV-1996;   96US-00748229.
PR   15-NOV-1996;   96US-00749431.
PR   04-DEC-1996;   96US-00760246.
PR   10-JAN-1997;   97US-00782047.
XX
PA   (MILL-) MILLENNIUM PHARM INC.
XX
PI   Glucksmann AM;
XX
DR   WPI; 1998-297866/26.
XX
PT   Treating type II diabetes with agent - useful for, e.g. modulating
PT   expression of hepatic nuclear factor or other diabetes-related gene.
XX
PS   Disclosure; Page 80; 113pp; English.
XX
CC   This is the nucleotide sequence of the PCR primer used for amplification
CC   in the method of the invention, which involves modulating the expression
CC   of hepatic nuclear factor or other diabetes related gene. The method is
CC   used to treat early onset type II diabetes and defects in insulin
CC   secretion. It is based on the discovery that certain mutations in the
CC   HNF1 gene, encoding a transcription factor, are involved in these
CC   conditions
XX
SQ   Sequence 17 BP; 2 A; 3 C; 8 G; 4 T; 0 U; 0 Other;

  Query Match          0.4%;  Score 15;  DB 1;  Length 17;
  Best Local Similarity  100.0%;  Pred. No. 1.9e+02;
  Matches   15;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        402 CTGCAGGTGCTGGAT 416
              ||||||||||||||||
Db          2 CTGCAGGTGCTGGAT 16


RESULT 336
AAF04657/c
ID   AAF04657 standard; DNA; 17 BP.
XX
AC   AAF04657;
XX
DT   16-FEB-2001  (first entry)
XX
DE   Hammerhead ribozyme substrate #2173.
XX
KW   Ribozyme; erythropoietin; granulocyte colony stimulating factor;
KW   interferon alpha; ss.
XX
OS   Homo sapiens.
XX
PN   WO200061729-A2.
XX
PD   19-OCT-2000.
XX
PF   11-APR-2000; 2000WO-US009721.
XX
PR   12-APR-1999;   99US-0129390P.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
XX
PI   Blatt L,  Zwick M,  Pavco P,  Mcswiggen J;
XX
DR   WPI; 2000-647423/62.
XX
PT   Enzymatic and antisense nucleic acid inhibition of repressor genes,
PT   useful for producing e.g. granulocyte colony stimulating factor protein,
PT   interferon alpha and erythropoietin.
XX
PS   Claim 4; Page 105; 164pp; English.
XX
CC   The present invention relates to enzymatic and antisense nucleic acid
CC   molecules that act as inhibitors of the expression of repressor genes
CC   encoding the TR2 Orphan receptor, EAR3/COUP-TF-1, the GATA transcription
CC   factor gene, IRF-2 and/or the CAATT Displacement Protein (CDP).
CC   Inhibition of the repressors removes prevents inhibition (and
CC   consequently increases expression of) genes involved in the production of
CC   erythropoietin, granulocyte colony stimulating factor protein and
CC   interferon alpha
XX
SQ   Sequence 17 BP; 5 A; 4 C; 4 G; 4 T; 0 U; 0 Other;

  Query Match          0.4%;  Score 15;  DB 1;  Length 17;
  Best Local Similarity  100.0%;  Pred. No. 1.9e+02;
  Matches   15;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1896 CAGAATGACTTTGCT 1910
              ||||||||||||||||
Db         15 CAGAATGACTTTGCT 1


RESULT 337
AAF04209/c
ID   AAF04209 standard; DNA; 17 BP.
XX
AC   AAF04209;
XX
DT   16-FEB-2001  (first entry)
XX
DE   Hammerhead ribozyme substrate #1725.
XX
KW   Ribozyme; erythropoietin; granulocyte colony stimulating factor;
KW   interferon alpha; ss.
XX
OS   Homo sapiens.
XX
PN   WO200061729-A2.
XX
PD   19-OCT-2000.
XX
PF   11-APR-2000; 2000WO-US009721.
XX
PR   12-APR-1999;   99US-0129390P.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
XX
PI   Blatt L,  Zwick M,  Pavco P,  Mcswiggen J;
XX
DR   WPI; 2000-647423/62.
```

```
XX
PT   Enzymatic and antisense nucleic acid inhibition of repressor genes,
PT   useful for producing e.g. granulocyte colony stimulating factor protein,
PT   interferon alpha and erythropoietin.
XX
PS   Claim 4; Page 95; 164pp; English.
XX
CC   The present invention relates to enzymatic and antisense nucleic acid
CC   molecules that act as inhibitors of the expression of repressor genes
CC   encoding the TR2 Orphan receptor, EAR3/COUP-TF-1, the GATA transcription
CC   factor gene, IRF-2 and/or the CAATT Displacement Protein (CDP).
CC   Inhibition of the repressors removes prevents inhibition (and
CC   consequently increases expression of) genes involved in the production of
CC   erythropoietin, granulocyte colony stimulating factor protein and
CC   interferon alpha
XX
SQ   Sequence 17 BP; 5 A; 4 C; 4 G; 4 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 15;  DB 1;  Length 17;
  Best Local Similarity   100.0%;  Pred. No. 1.9e+02;
  Matches   15;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1896 CAGAATGACTTTGCT 1910
                ||||||||||||||
Db         15 CAGAATGACTTTGCT 1


RESULT 338
ABK03219/c
ID   ABK03219 standard; RNA; 17 BP.
XX
AC   ABK03219;
XX
DT   12-MAR-2002  (first entry)
XX
DE   Human CD20 Inozyme #170.
XX
KW   Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic;
KW   cerebroprotective; nootropic; neuroprotective; antiparkinsonian;
KW   muscular; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme;
KW   DNAzyme; inozyme; G-cleaver; amberzyme; zinzyme; lymphoma; leukaemia;
KW   B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia;
KW   human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma;
KW   MCL; immunocytoma; IMC; immune thrombocytopaenia; stroke; dementia;
KW   inflammatory arthropathy; central nervous system injury;
KW   cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis;
KW   chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS;
KW   Parkinson's disease; ataxia; Huntington's disease;
KW   Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
PN   WO200159103-A2.
XX
PD   16-AUG-2001.
XX
PF   09-FEB-2001; 2001WO-US004273.
XX
PR   11-FEB-2000; 2000US-0181797P.
PR   28-FEB-2000; 2000US-0185516P.
PR   06-MAR-2000; 2000US-0187128P.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
PA   (BLAT/) BLATT L.
PA   (MCSW/) MCSWIGGEN J.
PA   (CHOW/) CHOWRIRA B M.
XX
PI   Blatt L,  Mcswiggen J,  Chowrira BM;
XX
DR   WPI; 2001-607195/69.
XX
PT   Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense
PT   constructs, which down regulate expression of a CD20 gene or neurite
PT   growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and
PT   central nervous system injury.
XX
PS   Claim 30; Page 148; 200pp; English.
XX
CC   The invention relates to a nucleic acid molecule which down regulates
CC   expression of a CD20 gene and a nucleic acid molecule which down
CC   regulates expression of a neurite growth inhibitor gene (NOGO). The
CC   nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a
CC   DNAzyme) an Inozyme (an endolytic nucleic acid cleaving a an RNA molecule
CC   possessing an NCH motif), a G-cleaver (cleaving RNA with a NYN motif) pr
CC   an amberzyme (cleaving RNA with an NGN triplet), a zinzyme (cleaving RNA
CC   with a YGY motif). The CD20-targetting nucleic acid is used to cleave RNA
CC   of CD20 in the presence of a divalent cation that is preferably Mg^2^+.
CC   Furthermore, it may be contacted with a cell to reduce CD20 activity of
CC   the cell and treat a patient having a condition associated with the level
CC   of CD20. The treatment may further comprise the use of one or more
CC   therapies. In particular, the CD20 targetting nucleic acid may be used to
CC   treat lymphoma, leukaemia, B-cell lymphoma, low-grade or follicular non-
CC   Hodgkin's lymphoma (NHL), bulky low-grade or follicular NHL, lymphocytic
CC   leukaemia, HIV (human immunodeficiency virus) associated NHL, mantle-cell
CC   lymphoma (MCL), immunocytoma (IMC), small B-cell lymphocytic lymphoma,
CC   immune thrombocytopaenia, and inflammatory arthropathy. The NOGO-
CC   targetting nucleic acid is used to cleave RNA of the NOGO gene in the
CC   presence of a divalent cation that is preferably Mg^2^+. Furthermore, the
CC   nucleic acid may be contacted with a cell to reduce NOGO activity of the
CC   cell and treat a patient having a condition associated with the level of
CC   NOGO. The treatment may further comprise the use of one or more
CC   therapies. In particular, the NOGO-targetting nucleic acid may be used to
CC   treat central nervous system (CNS) injury and cerebrovascular accident
CC   (CVA, stroke), Alzheimer's disease, dementia, multiple sclerosis (MS),
CC   chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (ALS),
CC   Parkinson's disease, ataxia, Huntington's disease, Creutzfeldt-Jakob
CC   disease, muscular dystrophy, and/or other neurodegenerative disease
CC   states which respond to the modulation of NOGO expression. The present
CC   sequence is an inozyme of the invention
XX
SQ   Sequence 17 BP; 3 A; 5 C; 3 G; 0 T; 6 U; 0 Other;

  Query Match             0.4%;  Score 15;  DB 1;  Length 17;
  Best Local Similarity   100.0%;  Pred. No. 1.9e+02;
  Matches   15;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       3797 CTGACAGGAGAACTA 3811
                ||||||||||||||
Db         17 CTGACAGGAGAACTA 3


RESULT 339
ABK03220/c
ID   ABK03220 standard; RNA; 17 BP.
XX
AC   ABK03220;
XX
DT   12-MAR-2002  (first entry)
XX
DE   Human CD20 Inozyme #171.
XX
KW   Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic;
KW   cerebroprotective; nootropic; neuroprotective; antiparkinsonian;
KW   muscular; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme;
KW   DNAzyme; inozyme; G-cleaver; amberzyme; zinzyme; lymphoma; leukaemia;
KW   B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia;
KW   human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma;
KW   MCL; immunocytoma; IMC; immune thrombocytopaenia; stroke; dementia;
KW   inflammatory arthropathy; central nervous system injury;
KW   cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis;
KW   chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS;
KW   Parkinson's disease; ataxia; Huntington's disease;
KW   Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.
XX
OS   Homo sapiens.
```

OS Synthetic.
XX
PN WO200159103-A2.
XX
PD 16-AUG-2001.
XX
PF 09-FEB-2001; 2001WO-US004273.
XX
PR 11-FEB-2000; 2000US-0181797P.
PR 28-FEB-2000; 2000US-0185516P.
PR 06-MAR-2000; 2000US-0187128P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
PA (BLAT/) BLATT L.
PA (MCSW/) MCSWIGGEN J.
PA (CHOW/) CHOWRIRA B M.
XX
PI Blatt L, Mcswiggen J, Chowrira BM;
XX
DR WPI; 2001-607195/69.
XX
PT Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense
PT constructs, which down regulate expression of a CD20 gene or neurite
PT growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and
PT central nervous system injury.
XX
PS Claim 30; Page 148; 200pp; English.
XX
CC The invention relates to a nucleic acid molecule which down regulates
CC expression of a CD20 gene and a nucleic acid molecule which down
CC regulates expression of a neurite growth inhibitor gene (NOGO). The
CC nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a
CC DNAzyme) an Inozyme (an endolytic nucleic acid cleaving a an RNA molecule
CC possessing an NCH motif), a G-cleaver (cleaving RNA with a NYN motif) pr
CC an amberzyme (cleaving RNA with an NGN triplet), a zinzyme (cleaving RNA
CC with a YGY motif). The CD20-targetting nucleic acid is used to cleave RNA
CC of CD20 in the presence of a divalent cation that is preferably Mg^2^+.
CC Furthermore, it may be contacted with a cell to reduce CD20 activity of
CC the cell and treat a patient having a condition associated with the level
CC of CD20. The treatment may further comprise the use of one or more
CC therapies. In particular, the CD20 targetting nucleic acid may be used to
CC treat lymphoma, leukaemia, B-cell lymphoma, low-grade or follicular non-
CC Hodgkin's lymphoma (NHL), bulky low-grade or follicular NHL, lymphocytic
CC leukaemia, HIV (human immunodeficiency virus) associated NHL, mantle-cell
CC lymphoma (MCL), immunocytoma (IMC), small B-cell lymphocytic lymphoma,
CC immune thrombocytopaenia, and inflammatory arthropathy. The NOGO-
CC targetting nucleic acid is used to cleave RNA of the NOGO gene in the
CC presence of a divalent cation that is preferably Mg^2^+. Furthermore, the
CC nucleic acid may be contacted with a cell to reduce NOGO activity of the
CC cell and treat a patient having a condition associated with the level of
CC NOGO. The treatment may further comprise the use of one or more
CC therapies. In particular, the NOGO-targetting nucleic acid may be used to
CC treat central nervous system (CNS) injury and cerebrovascular accident
CC (CVA, stroke), Alzheimer's disease, dementia, multiple sclerosis (MS),
CC chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (ALS),
CC Parkinson's disease, ataxia, Huntington's disease, Creutzfeldt-Jakob
CC disease, muscular dystrophy, and/or other neurodegenerative disease
CC states which respond to the modulation of NOGO expression. The present
CC sequence is an inozyme of the invention
XX
SQ Sequence 17 BP; 3 A; 5 C; 3 G; 0 T; 6 U; 0 Other;

Query Match 0.4%; Score 15; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 1.9e+02;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 3797 CTGACAGGAGAACTA 3811
||||||||||||||
Db 15 CTGACAGGAGAACTA 1

RESULT 340
ABK02853/c

ID ABK02853 standard; RNA; 17 BP.
XX
AC ABK02853;
XX
DT 12-MAR-2002 (first entry)
XX
DE Human CD20 Hammerhead ribozyme #152.
XX
KW Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic;
KW cerebroprotective; nootropic; neuroprotective; antiparkinsonian;
KW muscular; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme;
KW DNAzyme; inozyme; G-cleaver; amberzyme; zinzyme; lymphoma; leukaemia;
KW B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia;
KW human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma;
KW MCL; immunocytoma; IMC; immune thrombocytopaenia; stroke; dementia;
KW inflammatory arthropathy; central nervous system injury;
KW cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis;
KW chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS;
KW Parkinson's disease; ataxia; Huntington's disease;
KW Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.
XX
OS Homo sapiens.
OS Synthetic.
XX
PN WO200159103-A2.
XX
PD 16-AUG-2001.
XX
PF 09-FEB-2001; 2001WO-US004273.
XX
PR 11-FEB-2000; 2000US-0181797P.
PR 28-FEB-2000; 2000US-0185516P.
PR 06-MAR-2000; 2000US-0187128P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
PA (BLAT/) BLATT L.
PA (MCSW/) MCSWIGGEN J.
PA (CHOW/) CHOWRIRA B M.
XX
PI Blatt L, Mcswiggen J, Chowrira BM;
XX
DR WPI; 2001-607195/69.
XX
PT Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense
PT constructs, which down regulate expression of a CD20 gene or neurite
PT growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and
PT central nervous system injury.
XX
PS Claim 30; Page 142; 200pp; English.
XX
CC The invention relates to a nucleic acid molecule which down regulates
CC expression of a CD20 gene and a nucleic acid molecule which down
CC regulates expression of a neurite growth inhibitor gene (NOGO). The
CC nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a
CC DNAzyme) an Inozyme (an endolytic nucleic acid cleaving a an RNA molecule
CC possessing an NCH motif), a G-cleaver (cleaving RNA with a NYN motif) pr
CC an amberzyme (cleaving RNA with an NGN triplet), a zinzyme (cleaving RNA
CC with a YGY motif). The CD20-targetting nucleic acid is used to cleave RNA
CC of CD20 in the presence of a divalent cation that is preferably Mg^2^+.
CC Furthermore, it may be contacted with a cell to reduce CD20 activity of
CC the cell and treat a patient having a condition associated with the level
CC of CD20. The treatment may further comprise the use of one or more
CC therapies. In particular, the CD20 targetting nucleic acid may be used to
CC treat lymphoma, leukaemia, B-cell lymphoma, low-grade or follicular non-
CC Hodgkin's lymphoma (NHL), bulky low-grade or follicular NHL, lymphocytic
CC leukaemia, HIV (human immunodeficiency virus) associated NHL, mantle-cell
CC lymphoma (MCL), immunocytoma (IMC), small B-cell lymphocytic lymphoma,
CC immune thrombocytopaenia, and inflammatory arthropathy. The NOGO-
CC targetting nucleic acid is used to cleave RNA of the NOGO gene in the
CC presence of a divalent cation that is preferably Mg^2^+. Furthermore, the
CC nucleic acid may be contacted with a cell to reduce NOGO activity of the
CC cell and treat a patient having a condition associated with the level of
CC NOGO. The treatment may further comprise the use of one or more

```
CC   therapies. In particular, the NOGO-targetting nucleic acid may be used to
CC   treat central nervous system (CNS) injury and cerebrovascular accident
CC   (CVA, stroke), Alzheimer's disease, dementia, multiple sclerosis (MS),
CC   chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (ALS),
CC   Parkinson's disease, ataxia, Huntington's disease, Creutzfeldt-Jakob
CC   disease, muscular dystrophy, and/or other neurodegenerative disease
CC   states which respond to the modulation of NOGO expression. The present
CC   sequence is a hammerhead ribozyme of the invention
XX
SQ   Sequence 17 BP; 3 A; 5 C; 3 G; 0 T; 6 U; 0 Other;

  Query Match             0.4%;  Score 15;  DB 1;  Length 17;
  Best Local Similarity   100.0%;  Pred. No. 1.9e+02;
  Matches   15;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       3797 CTGACAGGAGAACTA 3811
              |||||||||||||||
Db         16 CTGACAGGAGAACTA 2


RESULT 341
AAX21944/c
ID   AAX21944 standard; DNA; 20 BP.
XX
AC   AAX21944;
XX
DT   18-MAY-1999  (first entry)
XX
DE   Human B-raf kinase antisense oligonucleotide Isis#14141.
XX
KW   Antisense oligonucleotide; B-raf; human; inhibitor; T-cell activation;
KW   hyperproliferative disorder; cancer; restenosis; psoriasis;
KW   atherosclerosis; raf-associated tumour; diagnosis; therapy; ss.
XX
OS   Synthetic.
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   modified_base    1. .20
FT                    /*tag=  a
FT                    /note= "phosphorothioate bases"
XX
PN   WO9902167-A1.
XX
PD   21-JAN-1999.
XX
PF   06-JUL-1998;   98WO-US013961.
XX
PR   07-JUL-1997;   97US-00888982.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Monia BP;
XX
DR   WPI; 1999-120502/10.
XX
PT   New antisense oligonucleotides - for modulation of human B-raf gene
PT   expression.
XX
PS   Disclosure; Page 22; 72pp; English.
XX
CC   This sequence represents an example of an antisense oligonucleotide of
CC   the invention. The oligonucleotides are 8-50 nucleotides in length, and
CC   are targeted to a nucleic acid encoding human B-raf and which is capable
CC   of inhibiting human B-raf expression. The oligonucleotides is used to
CC   inhibit the (abnormal) expression of human B-raf, to inhibit
CC   hyperproliferation of cells, to treat or prevent an abnormal
CC   proliferative condition, e.g. hyperproliferative disorders such as cancer
CC   (e.g. of the brain or nervous system), restenosis, psoriasis or a
CC   disorder characterised by T-cell activation and growth. They may also be
CC   used to diagnose these diseases, as well as atherosclerosis. The
CC   oligonucleotides of the invention may be used to distinguish raf-
CC   associated tumours from tumours having other etiologies. The antisense
CC   oligonucleotides can also be used to quantify raf expression in assays
XX
SQ   Sequence 20 BP; 3 A; 6 C; 1 G; 10 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 15;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 2.4e+02;
  Matches   15;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1467 AAACAAATGAGTGAG 1481
              |||||||||||||||
Db         20 AAACAAATGAGTGAG 6


RESULT 342
ABT13950
ID   ABT13950 standard; DNA; 20 BP.
XX
AC   ABT13950;
XX
DT   13-FEB-2003  (first entry)
XX
DE   Human helicase-moi inhibiting oligonucleotide #75.
XX
KW   Human; antisense gene therapy; phosphorothioate backbone;
KW   antisense oligonucleotide; helicase-moi gene; inflammation; ss;
KW   helicase-moi-associated condition; infection; tumour formation;
KW   2-MOE nucleotide; 2'-methoxyethyl nucleotide.
XX
OS   Homo sapiens.
XX
PN   US6444466-B1.
XX
PD   03-SEP-2002.
XX
PF   10-MAY-2001; 2001US-00853768.
XX
PR   10-MAY-2001; 2001US-00853768.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Ward DT,  Watt AT;
XX
DR   WPI; 2002-749291/81.
XX
PT   Novel antisense compound for modulating expression of human helicase-moi
PT   and for treating inflammation, specifically hybridizes to a specific
PT   region in nucleic acid molecule encoding the human helicase-moi.
XX
PS   Claim 3; Col 45-46; 52pp; English.
XX
CC   The invention comprises antisense oligonucleotides which are targeted to
CC   the coding region of the human helicase-moi gene. The antisense
CC   oligonucleotides of the invention are useful for inhibiting the
CC   expression of human helicase-moi in cells or tissues, and for treating a
CC   helicase-moi-associated condition. The antisense oligonucleotides of the
CC   invention may also be used to delay infection, inflammation and tumour
CC   formation. The present DNA sequence represents a human helicase-moi gene
CC   antisense oligonucleotide of the invention. NOTE: The present DNA
CC   sequence has a phosphorothioate backbone, bases 1-5 and 16-20 are 2'-
CC   methoxyethyl (2'-MOE) nucleotides
XX
SQ   Sequence 20 BP; 6 A; 5 C; 3 G; 6 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 15;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 2.4e+02;
  Matches   15;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2331 ATCCATGAAGGTTTC 2345
              |||||||||||||||
Db          4 ATCCATGAAGGTTTC 18


RESULT 343
```

```
AAD44803/c
ID   AAD44803 standard; DNA; 20 BP.
XX
AC   AAD44803;
XX
DT   13-DEC-2002  (first entry)
XX
DE   Human B-raf kinase antisense oligonucleotide ISIS #14141.
XX
KW   Human; raf; hyperproliferation; neovascularisation; ocular angiogenesis;
KW   therapy; cancer; cytostatic; anti-angiogenic; vascular; ophthalmological;
KW   antisense; phosphorothioate backbone; B-raf kinase; ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base    1. .20
FT                    /*tag=  a
FT                    /mod_base= OTHER
FT                    /note= "Phosphorothioate backbone"
XX
PN   US6410518-B1.
XX
PD   25-JUN-2002.
XX
PF   18-FEB-2000; 2000US-00506073.
XX
PR   31-MAY-1994;   94US-00250856.
PR   31-MAY-1995;   95WO-US007111.
PR   26-NOV-1996;   96US-00756806.
PR   07-JUL-1997;   97US-00888982.
PR   06-JUL-1998;   98WO-US013961.
PR   28-AUG-1998;   98US-00143214.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Monia BP;
XX
DR   WPI; 2002-597918/64.
XX
PT   Treating cancer, angiogenesis or neovascularization by administering
PT   antisense oligonucleotides targeted to human raf sequences.
XX
PS   Example 18; Col 26; 41pp; English.
XX
CC   The present invention relates to novel antisense oligonucleotides which
CC   are targetted to nucleic acids encoding human raf proteins and capable of
CC   inhibiting raf expression. The invention also relates to methods of
CC   inhibiting hyperproliferation of cells which involves contacting the
CC   hyperproliferating cells with a therapeutically effective amount of an
CC   oligonucleotide of the invention. The method is useful for treating
CC   cancer, angiogenesis or neovascularisation, especially ocular
CC   angiogenesis or neovascularisation. The present DNA sequence is an
CC   antisense oligonucleotide targetted to human B-raf kinase
XX
SQ   Sequence 20 BP; 3 A; 6 C; 1 G; 10 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 15;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 2.4e+02;
  Matches   15;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1467 AAACAAATGAGTGAG 1481
             |||||||||||||||
Db         20 AAACAAATGAGTGAG 6


RESULT 344
ADF09797/c
ID   ADF09797 standard; DNA; 20 BP.
XX
AC   ADF09797;
XX
DT   12-FEB-2004  (first entry)
XX
DE   Human b-raf kinase antisense oligonucleotide seq id 66.
XX
KW   tumour metastasis; human; raf; raf expression inhibitor; cytostatic;
KW   antiarteriosclerotic; antisense-therapy; hyperproliferative disorder;
KW   atherosclerosis; tumour; b-raf kinase; antisense oligonucleotide; ss.
XX
OS   Homo sapiens.
XX
PN   US2003119769-A1.
XX
PD   26-JUN-2003.
XX
PF   14-JUN-2002; 2002US-00173225.
XX
PR   31-MAY-1994;   94US-00250856.
PR   31-MAY-1995;   95WO-US007111.
PR   26-NOV-1996;   96US-00756806.
PR   07-JUL-1997;   97US-00888982.
PR   06-JUL-1998;   98WO-US013961.
PR   28-AUG-1998;   98US-00143214.
PR   18-FEB-2000; 2000US-00506073.
PR   25-JAN-2002; 2002US-00057550.
XX
PA   (MONI/) MONIA B P.
XX
PI   Monia BP;
XX
DR   WPI; 2003-863446/80.
XX
PT   Preventing and/or treating conditions associated with raf expression,
PT   such as hyperproliferative disorders, atherosclerosis and tumors, using
PT   antisense oligonucleotide modulation of human raf gene expression.
XX
PS   Example 18; SEQ ID NO 93; 41pp; English.
XX
CC   The invention describes a method of preventing or treating tumour
CC   metastasis in an animal comprising administering to the animal an
CC   oligonucleotide 8-50 nucleotides in length, which is targeted to mRNA
CC   encoding human raf and capable of inhibiting raf expression. Also
CC   disclosed are raf oligonucleotides, nucleic acids, proteins and
CC   compositions used in the methods of the invention. The oligonucleotides
CC   have cytostatic and antiarteriosclerotic properties, are useful as Raf-
CC   inhibitors and in antisense-therapy. The methods and compositions of the
CC   present invention are useful for preventing and/or treating conditions
CC   associated with raf expression, such as hyperproliferative disorders,
CC   atherosclerosis and tumours. This sequence represents a human b-raf
CC   kinase antisense oligonucleotide.
XX
SQ   Sequence 20 BP; 3 A; 6 C; 1 G; 10 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 15;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 2.4e+02;
  Matches   15;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1467 AAACAAATGAGTGAG 1481
             |||||||||||||||
Db         20 AAACAAATGAGTGAG 6


RESULT 345
ABZ86360/c
ID   ABZ86360 standard; DNA; 20 BP.
XX
AC   ABZ86360;
XX
DT   17-OCT-2003  (first entry)
XX
DE   Human oligonucleotide sequence.
XX
KW   Human; antisense; lung dysfunction; nasal airway dysfunction;
KW   antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
```

KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW lung inflammation; respiratory disease; ds.
XX
OS Homo sapiens.
XX
PN WO200285308-A2.
XX
PD 31-OCT-2002.
XX
PF 23-APR-2002; 2002WO-US013135.
XX
PR 24-APR-2001; 2001US-0286137P.
XX
PA (EPIG-) EPIGENESIS PHARM INC.
XX
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
DR WPI; 2003-229219/22.
XX
PT Pharmaceutical composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisense to specific gene(s) or its
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT ubiquinone.
XX
PS Claim 15; SEQ ID NO 1602; 872pp; English.
XX
CC The invention relates to a novel pharmaceutical composition, which has a
CC first active agent comprising an oligonucleotide antisense to the
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC antiinflammatory steroid and ubiquinone. A composition of the invention
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
CC immunosuppressive, and cytostatic activity. The composition may have a
CC use in antisense gene therapy. The composition is useful for treating or
CC preventing a respiratory, lung or malignant disease or condition, also
CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC receptor, producing bronchodilation, increasing levels of ubiquinone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 20 BP; 5 A; 7 C; 6 G; 2 T; 0 U; 0 Other;

Query Match 0.4%; Score 15; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 2.4e+02;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2883 GTCTTCCAGGTGGGC 2897
||||||||||||||||
Db 20 GTCTTCCAGGTGGGC 6

RESULT 346
ABZ86408/c
ID ABZ86408 standard; DNA; 20 BP.
XX
AC ABZ86408;
XX
DT 17-OCT-2003 (first entry)
XX
DE Human oligonucleotide sequence.
XX
KW Human; antisense; lung dysfunction; nasal airway dysfunction;
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;

KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW lung inflammation; respiratory disease; ds.
XX
OS Homo sapiens.
XX
PN WO200285308-A2.
XX
PD 31-OCT-2002.
XX
PF 23-APR-2002; 2002WO-US013135.
XX
PR 24-APR-2001; 2001US-0286137P.
XX
PA (EPIG-) EPIGENESIS PHARM INC.
XX
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
DR WPI; 2003-229219/22.
XX
PT Pharmaceutical composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisense to specific gene(s) or its
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT ubiquinone.
XX
PS Claim 15; SEQ ID NO 1650; 872pp; English.
XX
CC The invention relates to a novel pharmaceutical composition, which has a
CC first active agent comprising an oligonucleotide antisense to the
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC antiinflammatory steroid and ubiquinone. A composition of the invention
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
CC immunosuppressive, and cytostatic activity. The composition may have a
CC use in antisense gene therapy. The composition is useful for treating or
CC preventing a respiratory, lung or malignant disease or condition, also
CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC receptor, producing bronchodilation, increasing levels of ubiquinone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 20 BP; 13 A; 2 C; 1 G; 4 T; 0 U; 0 Other;

Query Match 0.4%; Score 15; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 2.4e+02;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 3305 TTTTTATTTTTATAT 3319
||||||||||||||||
Db 15 TTTTTATTTTTATAT 1

RESULT 347
ACD42186/c
ID ACD42186 standard; DNA; 20 BP.
XX
AC ACD42186;
XX
DT 05-SEP-2003 (first entry)
XX
DE Antisense oligonucleotide targeting human b-raf, ISIS14141.
XX
KW Human; ss; antisense; c-raf; a-raf; b-raf; protein kinase; cancer;
KW signal transduction; cell proliferation; lung carcinoma; cytostatic;

KW antisense gene therapy; chemotherapeutic agent; angiogenesis;
KW hyperproliferative condition; neovascularisation; ocular angiogenesis.
XX
OS Homo sapiens.
XX
PN US2003032607-A1.
XX
PD 13-FEB-2003.
XX
PF 25-JAN-2002; 2002US-00057550.
XX
PR 31-MAY-1994; 94US-00250856.
PR 31-MAY-1995; 95WO-US007111.
PR 26-NOV-1996; 96US-00756806.
PR 07-JUL-1997; 97US-00888982.
PR 06-JUL-1998; 98WO-US013961.
PR 28-AUG-1998; 98US-00143214.
PR 18-FEB-2000; 2000US-00506073.
XX
PA (MONI/) MONIA B P.
XX
PI Monia BP;
XX
DR WPI; 2003-503332/47.
XX
PT Novel antisense oligonucleotide which is targeted to mRNA encoding human
PT raf and which is capable of inhibiting raf expression, useful for
PT treating or preventing hyperproliferative conditions such as cancer.
XX
PS Example 18; Page 14; 42pp; English.
XX
CC The invention relates to an oligonucleotide 8-50 nucleotides in length
CC which is targeted to mRNA encoding human c-raf, a-raf or b-raf (raf is a
CC protein kinase playing a regulatory role in signal transduction,
CC regulating cell proliferation and has been implicated in lung carcinoma),
CC and which is capable of inhibiting raf expression. Also included is a
CC composition comprising the oligonucleotide and a pharmaceutically
CC acceptable carrier. The antisense oligonucleotide is useful for
CC inhibiting the expression of human raf in human cells or tissues, by
CC contacting the human cells or tissues with the oligo. The oligo. is also
CC is useful for treating or preventing a disease or condition associated
CC with the expression of raf by administering it in combination with a
CC chemotherapeutic agent to a human or cells of the human, where the
CC expression of raf is abnormal expression, and the condition is a
CC hyperproliferative condition such as cancer, angiogenesis or
CC neovascularisation (preferably ocular angiogenesis or
CC neovascularisation). The oligo. is also useful for inhibiting
CC hyperproliferation of cells. The oligos. are also useful as tools, for
CC example for detecting and determining the role of raf expression in
CC various cell functions and physiological processes and conditions and for
CC diagnosing conditions associated with raf expression and for research
CC purposes. The present sequence is an antisense oligonucleotide targeting
CC a human raf mRNA
XX
SQ Sequence 20 BP; 3 A; 6 C; 1 G; 10 T; 0 U; 0 Other;

Query Match 0.4%; Score 15; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 2.4e+02;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Qy       1467 AAACAAATGAGTGAG 1481
             |||||||||||||||
Db         20 AAACAAATGAGTGAG 6
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RESULT 348
ADN60155
ID ADN60155 standard; DNA; 20 BP.
XX
AC ADN60155;
XX
DT 01-JUL-2004 (first entry)
XX
DE Human helicase-moi, antisense oligonucleotide #75.
XX
KW Cytostatic; Antisense therapy; ss; human; helicase-moi; inflammation;
KW hyperproliferative disorder; RNA-mediated interference; probe.
XX
OS Homo sapiens.
XX
FH Key Location/Qualifiers
FT modified_base 1. .20
FT /*tag= b
FT /mod_base= Other
FT /note= "Phosphorothioate linkages. All cytidines are 5'-
FT methylcytidines"
FT modified_base 1. .5
FT /*tag= a
FT /mod_base= Other
FT /note= "2'-methoxyethyl (2'-MOE) nucleotides"
FT modified_base 16. .20
FT /*tag= c
FT /mod_base= Other
FT /note= "2'-methoxyethyl (2'-MOE) nucleotides"
XX
PN US2003176380-A1.
XX
PD 18-SEP-2003.
XX
PF 31-MAY-2002; 2002US-00160632.
XX
PR 10-MAY-2001; 2001US-00853768.
XX
PA (WARD/) WARD D T.
PA (WATT/) WATT A T.
XX
PI Ward DT, Watt AT;
XX
DR WPI; 2003-898586/82.
XX
PT New antisense oligonucleotides for modulating helicase-moi expression,
PT useful for diagnosing, preventing or treating diseases or conditions
PT associated with helicase-moi, e.g. inflammation or hyperproliferative
PT disorders.
XX
PS Claim 3; SEQ ID NO 88; 56pp; English.
XX
CC The invention relates to antisense oligonucleotides, compositions and
CC methods for modulating the expression of helicase-moi. The
CC oligonucleotides are used in treating an animal having a disease or
CC condition associated with helicase-moi, such as inflammation, a
CC hyperproliferative disorder or a condition that arises from RNA-mediated
CC interference. The present sequence represents a human helicase-moi
CC antisense oligonucleotide.
XX
SQ Sequence 20 BP; 6 A; 5 C; 3 G; 6 T; 0 U; 0 Other;

Query Match 0.4%; Score 15; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 2.4e+02;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Qy       2331 ATCCATGAAGGTTTC 2345
              |||||||||||||||
Db          4 ATCCATGAAGGTTTC 18
```

RESULT 349
ABD22590/c
ID ABD22590 standard; DNA; 20 BP.
XX
AC ABD22590;
XX
DT 29-JUL-2004 (first entry)
XX
DE Human cathepsin C-derived oligo SEQ ID 1602.
XX

KW Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
KW surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;
KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
KW pulmonary transplantation rejection; ss; primer.
XX
OS Homo sapiens.
XX
PN WO200285309-A2.
XX
PD 31-OCT-2002.
XX
PF 23-APR-2002; 2002WO-US013143.
XX
PR 24-APR-2001; 2001US-0286036P.
XX
PA (EPIG-) EPIGENESIS PHARM INC.
XX
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
DR WPI; 2003-093058/08.
XX
PT Pharmaceutical composition for treating asthma, has antisense
PT oligonucleotide containing less percentage of adenosine, targeted to
PT nucleic acids associated with lung airway or lung dysfunction, and
PT bronchodilating agent.
XX
PS Claim 15; SEQ ID NO 1602; 763pp; English.
XX
CC This invention describes a novel composition (a) a first active agent,
CC comprising oligonucleotides, effective for alleviating
CC bronchoconstriction, respiratory tract inflammation, allergies and
CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
CC surfactant depletion or hyposecretion, when administered to a mammal. The
CC oligonucleotides are derived from a gene encoding or regulating
CC expression of a target polypeptide associated with lung airway or lung
CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
CC The invention also describes a kit, that comprises: (a) a delivery
CC device, in separate containers, (b) the oligonucleotides, (c)
CC instructions for adding a carrier and for use of the kit. The composition
CC of the invention has antiallergic, antiinflammatory, antiasthmatic,
CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
CC beta-adrenergic agonist. The composition is useful for preventing or
CC treating a respiratory, lung or malignant disease. The administered
CC composition comprises oligo and is administered to reduce the production
CC or availability, or to increase the degradation of the target mRNA or to
CC reduce the amount of target polypeptide present in the lungs. The
CC pulmonary obstruction, and/or bronchoconstriction and/or lung
CC inflammation, allergies and/or surfactant hypoproduction are associated
CC with a disease or condition such as pulmonary vasoconstriction,
CC inflammation, allergies, asthma, impeded respiration, respiratory
CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
CC transplantation rejection, pulmonary infections, bronchitis or cancer.
CC The reduced adenosine content of the anti-sense oligos corresponding to
CC thymidines present in the target RNA serves to prevent the breakdown of
CC the oligonucleotides into products that free adenosine into the system
CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
CC prevent any unwanted effects due to it
XX
SQ Sequence 20 BP; 5 A; 7 C; 6 G; 2 T; 0 U; 0 Other;

Query Match 0.4%; Score 15; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 2.4e+02;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2883 GTCTTCCAGGTGGGC 2897
||||||||||||||
Db 20 GTCTTCCAGGTGGGC 6

RESULT 350
ABD22638/c
ID ABD22638 standard; DNA; 20 BP.
XX
AC ABD22638;
XX
DT 29-JUL-2004 (first entry)
XX
DE Human myosin X-derived oligonucleotide SEQ ID 1650.
XX
KW Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
KW surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;
KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
KW pulmonary transplantation rejection; ss; primer.
XX
OS Homo sapiens.
XX
PN WO200285309-A2.
XX
PD 31-OCT-2002.
XX
PF 23-APR-2002; 2002WO-US013143.
XX
PR 24-APR-2001; 2001US-0286036P.
XX
PA (EPIG-) EPIGENESIS PHARM INC.
XX
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
DR WPI; 2003-093058/08.
XX
PT Pharmaceutical composition for treating asthma, has antisense
PT oligonucleotide containing less percentage of adenosine, targeted to
PT nucleic acids associated with lung airway or lung dysfunction, and
PT bronchodilating agent.
XX
PS Claim 15; SEQ ID NO 1650; 763pp; English.
XX
CC This invention describes a novel composition (a) a first active agent,
CC comprising oligonucleotides, effective for alleviating
CC bronchoconstriction, respiratory tract inflammation, allergies and
CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
CC surfactant depletion or hyposecretion, when administered to a mammal. The
CC oligonucleotides are derived from a gene encoding or regulating
CC expression of a target polypeptide associated with lung airway or lung
CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
CC The invention also describes a kit, that comprises: (a) a delivery
CC device, in separate containers, (b) the oligonucleotides, (c)
CC instructions for adding a carrier and for use of the kit. The composition
CC of the invention has antiallergic, antiinflammatory, antiasthmatic,
CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
CC beta-adrenergic agonist. The composition is useful for preventing or
CC treating a respiratory, lung or malignant disease. The administered
CC composition comprises oligo and is administered to reduce the production
CC or availability, or to increase the degradation of the target mRNA or to
CC reduce the amount of target polypeptide present in the lungs. The
CC pulmonary obstruction, and/or bronchoconstriction and/or lung
CC inflammation, allergies and/or surfactant hypoproduction are associated
CC with a disease or condition such as pulmonary vasoconstriction,
CC inflammation, allergies, asthma, impeded respiration, respiratory
CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
CC transplantation rejection, pulmonary infections, bronchitis or cancer.
CC The reduced adenosine content of the anti-sense oligos corresponding to
CC thymidines present in the target RNA serves to prevent the breakdown of
CC the oligonucleotides into products that free adenosine into the system

```
CC   e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
CC   prevent any unwanted effects due to it
XX
SQ   Sequence 20 BP; 13 A; 2 C; 1 G; 4 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 15;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 2.4e+02;
  Matches   15;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       3305 TTTTTATTTTTATAT 3319
              ||||||||||||||||
Db         15 TTTTTATTTTTATAT 1


RESULT 351
ADI66983/c
ID   ADI66983 standard; DNA; 20 BP.
XX
AC   ADI66983;
XX
DT   22-APR-2004  (first entry)
XX
DE   Human DEXRAS1 DNA antisense oligonucleotide target region #24.
XX
KW   Human; DEXRAS1; ss; antisense oligonucleotide; phosphorothioate linkage;
KW   2'-O-methoxyethyl sugar moiety; 5-methylcytosine;
KW   hyperproliferative disorder; cancer; neurological disorder;
KW   aberrant nitric oxide signalling; inflammation; tumour formation;
KW   cytostatic; neuroprotective; antiinflammatory; antimicrobial.
XX
OS   Homo sapiens.
XX
PN   US2004005706-A1.
XX
PD   08-JAN-2004.
XX
PF   28-JUN-2002; 2002US-00185035.
XX
PR   28-JUN-2002; 2002US-00185035.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Monia BP,  Dobie KW;
XX
DR   WPI; 2004-081730/08.
XX
PT   New antisense compounds targeted to nucleic acid molecules encoding
PT   DEXRAS1, useful for treating diseases associated with expression of
PT   DEXRAS1, e.g. neurological disorder or hyperproliferative disorder such
PT   as cancer.
XX
PS   Example 15; SEQ ID NO 114; 62pp; English.
XX
CC   The invention relates to an antisense oligonucleotide targeted to a
CC   nucleic acid encoding the human DEXRAS1 polypeptide which specifically
CC   hybridises with the nucleic acid molecule and inhibits the expression of
CC   DEXRAS1. The antisense oligonucleotide comprises at least one modified
CC   internucleoside linkage, i.e. a phosphorothioate linkage, at least one
CC   modified sugar moiety, preferably a 2'-O-methoxyethyl sugar moiety, or at
CC   least one modified nucleobase comprising a 5-methylcytosine. The
CC   antisense oligonucleotides and compounds are useful for inhibiting the
CC   expression of DEXRAS1 and for treating diseases or conditions associated
CC   with expression of DEXRAS1, e.g. hyperproliferative disorders such as
CC   cancer, neurological disorders or a disease or condition arising from
CC   aberrant nitric oxide signalling. The antisense compounds are also useful
CC   as research reagents and kits or in diagnostic, therapeutic and
CC   prophylactic applications, e.g. to prevent or delay infection,
CC   inflammation or tumour formation. This sequence represents an antisense
CC   oligonucleotide target region of the invention.
XX
SQ   Sequence 20 BP; 4 A; 7 C; 4 G; 5 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 15;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 2.4e+02;
  Matches   15;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2509 AGGTGGAGCTGTACC 2523
              ||||||||||||||||
Db         20 AGGTGGAGCTGTACC 6


RESULT 352
ADI66926
ID   ADI66926 standard; DNA; 20 BP.
XX
AC   ADI66926;
XX
DT   22-APR-2004  (first entry)
XX
DE   Human DEXRAS1 DNA antisense oligonucleotide #45.
XX
KW   Human; DEXRAS1; ss; antisense oligonucleotide; phosphorothioate linkage;
KW   2'-O-methoxyethyl sugar moiety; 5-methylcytosine;
KW   hyperproliferative disorder; cancer; neurological disorder;
KW   aberrant nitric oxide signalling; inflammation; tumour formation;
KW   cytostatic; neuroprotective; antiinflammatory; antimicrobial.
XX
OS   Homo sapiens.
XX
PN   US2004005706-A1.
XX
PD   08-JAN-2004.
XX
PF   28-JUN-2002; 2002US-00185035.
XX
PR   28-JUN-2002; 2002US-00185035.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Monia BP,  Dobie KW;
XX
DR   WPI; 2004-081730/08.
XX
PT   New antisense compounds targeted to nucleic acid molecules encoding
PT   DEXRAS1, useful for treating diseases associated with expression of
PT   DEXRAS1, e.g. neurological disorder or hyperproliferative disorder such
PT   as cancer.
XX
PS   Example 15; SEQ ID NO 57; 62pp; English.
XX
CC   The invention relates to an antisense oligonucleotide targeted to a
CC   nucleic acid encoding the human DEXRAS1 polypeptide which specifically
CC   hybridises with the nucleic acid molecule and inhibits the expression of
CC   DEXRAS1. The antisense oligonucleotide comprises at least one modified
CC   internucleoside linkage, i.e. a phosphorothioate linkage, at least one
CC   modified sugar moiety, preferably a 2'-O-methoxyethyl sugar moiety, or at
CC   least one modified nucleobase comprising a 5-methylcytosine. The
CC   antisense oligonucleotides and compounds are useful for inhibiting the
CC   expression of DEXRAS1 and for treating diseases or conditions associated
CC   with expression of DEXRAS1, e.g. hyperproliferative disorders such as
CC   cancer, neurological disorders or a disease or condition arising from
CC   aberrant nitric oxide signalling. The antisense compounds are also useful
CC   as research reagents and kits or in diagnostic, therapeutic and
CC   prophylactic applications, e.g. to prevent or delay infection,
CC   inflammation or tumour formation. This sequence represents an antisense
CC   oligonucleotide of the invention.
XX
SQ   Sequence 20 BP; 5 A; 4 C; 7 G; 4 T; 0 U; 0 Other;

  Query Match             0.4%;  Score 15;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 2.4e+02;
  Matches   15;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2509 AGGTGGAGCTGTACC 2523
              ||||||||||||||||
Db          1 AGGTGGAGCTGTACC 15
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Job time : 17 secs

GenCore version 5.1.6

OM nucleic - nucleic search, using sw model

Run on: February 16, 2005, 09:29:15 ; Search time 0.001 Seconds
(without alignments)
144.818 Million cell updates/sec

Title: us-10-001-863-3
Perfect score: 3811
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Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 0.5

Searched: 1 seqs, 19 residues

Total number of hits satisfying chosen parameters: 2

Minimum DB seq length: 8
Maximum DB seq length: 80

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 1 summaries

Database : rstdb:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description
1	15.8	0.4	19	1	BX551013	ACCESSION:BX551013

ALIGNMENTS

RESULT 1
BX551013
LOCUS BX551013 19 bp mRNA linear EST 10-OCT-2003
DEFINITION BX551013 Glossina morsitans morsitans adult infected gut Glossina morsitans morsitans cDNA clone Tse116a12_q1c, mRNA sequence.
ACCESSION BX551013
VERSION BX551013.1 GI:33374827
KEYWORDS EST.
SOURCE Glossina morsitans morsitans
ORGANISM Glossina morsitans morsitans
Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota; Neoptera; Endopterygota; Diptera; Brachycera; Muscomorpha; Hippoboscoidea; Glossinidae; Glossina.
REFERENCE 1 (bases 1 to 19)
AUTHORS Lehane,M.J., Aksoy,S., Gibson,W., Kerhornou,A., Berriman,M., Hamilton,J., Soares,M.B., Bonaldo,M.F., Lehane,S. and Hall,N.
TITLE Adult midgut expressed sequence tags from the tsetse fly Glossina morsitans morsitans and expression analysis of putative immune response genes
JOURNAL Genome Biol. 4 (10), R63 (2003)
MEDLINE 22881942
PUBMED 14519198
COMMENT Contact: Hall N
Pathogen Sequencing Unit
The Sanger Institute The Wellcome Trust Genome Campus
Hinxton, Cambridge, CB10 1SA, UK
Request for clones, please contact: Mike Lehane
Prof. M.J.Lehane
School of Biological Sciences,
University of Wales,
Bangor LL57 2UW
All clones with suffix q1c are reverse primer reads starting at 5' end of the cDNA all p1c reads are from the 3' end.
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/db_xref="taxon:37546"
/clone="Tse116a12_q1c"
/tissue_type="adult infected gut"
/clone_lib="Glossina morsitans morsitans adult infected gut"
/note="country: Zimbabwe; EST from adult gut infected with T.brucei"

Query Match 0.4%; Score 15.8; DB 1; Length 19;
Best Local Similarity 89.5%; Pred. No. 0;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

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Qy       1974 GTTGAACGAATGGAATGTG 1992
              ||||||| ||| ||||||
Db          1 GTTGAACGTATGTAATGTG 19
```

Search completed: February 16, 2005, 09:29:16
Job time : 0.001 secs